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Subj: UH-1Y T&R MANUAL

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Encl: (1) UH-1Y T&R MANUAL

1. Purpose. To publish standards and regulations regarding the training of UH-1Y aircrew per the reference.

2. Information. The standards, regulations, and procedures established in this manual are the result of a collaborative effort of subject matter experts from Deputy Commandant, Aviation (APP), HX-21, COMOPTEVFOR H-1 Operational Test Team, MAWTS-1, HMT-303, Marine Forces, and TECOM ATB.

3. Recommendations. Recommended changes to this publication are invited, and may be submitted via the syllabus sponsor (MAWTS-1) and the appropriate chain of command to: Commanding General, Training and Education Command, Aviation Training Branch via e-mail (refer to http://www.tecom.usmc.mil/atb/contacts_.htm) or the Defense Message System using the following plain language address: CG TECOM QUANTICO VA ATB.

4. Reserve Applicability. This manual is applicable to the Marine Corps Total Force.

5. Certification. Reviewed and approved this date.

GEORGE J. FLYNN
By direction

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CHAPTER 1

UH-1Y PILOT

FIGURES

100. MARINE LIGHT ATTACK SQUADRON (HMLA) UNIT CORE COMPETENCY. Marine Aviation plays a crucial role in the MAGTF's ability to conduct Maneuver Warfare. The ultimate goal of Marine Aviation is to attain the highest possible combat readiness to support Expeditionary Maneuver Warfare while at the same time preserving and conserving our Marines and equipment. Embedded within our combat readiness is the ability to rapidly, effectively, and efficiently deploy on short notice and the ability to quickly and effectively plan for crises and/or contingency operations thereby ensuring Marine Aviation remains ready for combat when and where the need arises. The T&R Program Manual represents the collaborative effort of Marine Aviation Subject Matter Experts who designed training standards to maximize combat capabilities. These standards, intrinsic in the core competency section, describe and define unit capabilities and requirements necessary to maintain like-squadron proficiency in core skills and combat leadership. Training events are based on specific requirements and performance standards to ensure aircrew maintain a common base of training and depth of combat capabilities. Together, the T&R comprises a building block approach to ensure that trained aircrews remain ready, relevant, and fully capable of supporting the MAGTF commander.

NOTE

The capabilities defined and described in the core capability and unit template sections are provided to ensure each like squadron maintains a common base of training and depth of capabilities. When resources permit, and when in the judgment of the commander additional training would significantly increase the unit's warfighting capability, training to a level above these base capabilities is permitted. It is incumbent upon and expected of the commander to balance any increase in the depth of core capabilities against the long-term health and readiness of the unit while staying within resource constraints.

1. HMLA Mission. Support the MAGTF Commander by providing offensive air support, utility support, armed escort and airborne supporting arms coordination, day or night under all weather conditions during expeditionary, joint or combined operations.

2. UH-1 Mission Essential Task List (METL)

a. (UJTL TA 1.1.2) Conduct Shipboard Deck helicopter Landing Qualifications.

b. (UJTL TA 1.1.4) Conduct Sea and Air Deployment Operations.
- Maintain the capability to deploy and operate from advanced bases, expeditionary airfields, Forward Operating Bases (FOBs), and Naval Shipping.
- Perform organizational maintenance on assigned aircraft.

c. (UJTL TA 1.2.1) Conduct Air Assault Operations and Air Assault.
- Provided assault support transport of combat troops.
- Provide support for casualty evacuation operations.
- Provide armed escort for assault helicopters and tilt rotor aircraft.

d. (UJTL TA 1.2.3) Conduct Amphibious Assault and Raid Operations.
- Conduct assault support for maritime special operations.
- Provide armed escort for airborne and surface forces.

e. (UJTL TA 3.2.1) Conduct Fire Support.
- Provide fire support for forward and rear area forces against point and area targets.

f. (UJTL TA 3.2.2) Conduct Close Air Support.

g. (UJTL TA 3.2.3) Conduct Interdiction Operations.
- Conduct armed reconnaissance.

h. (UJTL TA 3.2.8) Conduct Air-to-Air Operations.
- Maintain self-defense capability from air-to-air threats.

i. (UJTL TA 3.3) Coordinate Battlespace Maneuver and Integrate with Firepower.
- Provide control, coordination, target acquisition, and terminal guidance for supporting arms.
- Provide airborne command, control and coordination for assault support operations.
- Conduct multi-sensor imagery, visual reconnaissance, and provide Battle Damage Assessment(BDA).

j. (UJTL TA 6.2) Conduct Joint Personnel Recovery.
- Conduct Tactical Recovery of Aircraft and Personnel (TRAP) operations.
- Augment local Search and Rescue (SAR) assets.

k. (UJTL TA 6.3) Conduct Rear Area Security.
- Provide fire support and security for rear area forces.

l. (UJTL TA 6.4) Conduct Noncombatant Evacuation.
- Provide Fire Support and escort for evacuation operations.
- Provide support for evacuation operations.

3. Table of Organization. Refer to Table of Organization 8970 managed by Total Force Structure, MCCDC, for current authorized organizational structure and personnel strength. As of this publication date, HMLA units are authorized:

HMLA SQUADRON
18 AH-1Z, 9 UH-1Y
Pilots: 44 AH-1Z, 23 UH-1Y
19 Crew Chiefs, 17 Aerial Gunners/Observers

HMLA DETACHMENT
6 AH-1Z & 3 UH-1Y
Pilots: 14 AH-1Z, 7 UH-1Y
5 Crew Chiefs, 5 Aerial Gunners/Observers

4. Core Capability. A core capable HMLA unit is able to sustain the number of sorties listed below on a daily basis during contingency/combat operations. The sortie rates are based on 1.5 hour average sortie duration and assumes $\geq$ 70 percent FMC aircraft and $\geq$ 90 percent T/O aircrew on hand. If unit FMC aircraft < 70 percent or T/O aircrew < 90 percent, core capability will be degraded by a like percentage. A core capable unit is able to accomplish all tasks designated in the unit METL from a main base, expeditionary base, or amphibious platform.

a. Core Capable Squadron. A Core Capable HMLA squadron is able to sustain 30 AH-1Z and 15 UH-1Y sorties per 24-hour period.

b. Core Capable Squadron (-). A Core Capable squadron (-) is able to sustain 21 AH-1Z and 10 UH-1Y sorties per 24-hour period.

c. Core Capable Detachment. A Core Capable detachment is able to sustain 10 AH-1Z and 5 UH-1Y sorties per 24-hour period.

5. METL/Core Skill Matrix. UH-1Y core skills directly support the METL as follows:

	CORE SKILL												CORE PLUS SKILL				
METL	TERF	TCT	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC(A)	SPMSN	DACM	NBC	CQ	TAC
a. Conduct Shipboard Deck helicopter Landing Qualifications					X											X	
b. Conduct Sea and Air Deployment Operations					X											X	
c. Conduct Air Assault and Air Assault Operations	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
d. Conduct Amphibious Assault & Raid Operations	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
e. Conduct Fire Support	X	X	X	X		X	X	X	X	X		X			X		X
f. Conduct Close Air Support	X	X	X			X	X	X	X	X		X			X		
g. Conduct Interdiction Operations	X	X	X			X		X	X	X		X			X		
h. Conduct Air-to-Air Operations	X	X				X	X							X			
i. Coordinate Battlespace Maneuver and Integrate w/ Firepower	X		X			X	X	X	X	X	X	X					X
j. Conduct Joint Personnel Recovery	X	X	X	X		X	X	X	X	X	X	X	X			X	
k. Conduct Rear Area Security	X	X	X	X		X	X	X	X	X	X	X	X		X	X	
l. Conduct Noncombatant Evacuation	X	X	X	X		X	X	X	X	X	X	X	X			X	

6. UH-1Y Core Model Minimum Requirements. Squadron core competency reflects the minimum level of competency a squadron must achieve to perform its core capability. Squadron core competency is measured in terms of minimum Core Skill Proficiency (CSP) and minimum numbers of flight leaders per paragraphs (a) and (b) below:

a. Minimum Unit CSP Requirements. As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of UH-1Y crews who are proficient in each core skill (Unit CSP). In order to be considered proficient in a core skill (individual CSP), a UH-1Y crewmember must attain and maintain proficiency in core skill events, as delineated in paragraphs (1) and (2) below. The standard UH-1Y crew consists of 2 Pilots, a Crew Chief, and an AO/AG.

NOTE: SPMSN, DACM, NBC, CQ and TAC are core plus skills. Proficiency in these skills is not required to obtain unit CSP and will not contribute to unit T-level readiness.

	UH-1Y Unit CSP Requirements Squadron			
Core Skill Core Plus	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	12	6	6	6
TCT	6	3	3	3
REC	12	--	--	6
CAL	12	6	6	6
FCLP	4	2	2	2
SWD	10	5	5	5
ESC	10	5	5	5
OAS	8	4	4	4
NS HLL	12	6	6	6
ANSQ	8	4	4	4
ASPT	12	6	6	6
FAC(A)**	4	--	--	4
ASPT	4	2	2	2
SPMSN	4	2	2	2
OAS	4	2	2	2
DACM	6	3	3	3
NBC	2	1	1	1
CQ	4	2	2	2
TAC	4	2	2	2

** A FAC(A) capable crew requires 1 FAC(A) per aircraft.

	UH-1Y Unit CSP Requirements Squadron (-)			
Core Skill Core Plus	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	8	4	4	4
TCT	4	2	2	2
REC	8	--	--	4
CAL	8	4	4	4
FCLP	2	1	1	1
SWD	6	3	3	3
ESC	6	3	3	3
OAS	4	2	2	2
NS HLL	8	4	4	4
ANSQ	4	2	2	2
ASPT	8	4	4	4
FAC(A)**	2	--	--	2
ASPT	2	1	1	1
SPMSN	2	1	1	1
OAS	2	1	1	1
DACM	2	1	1	1
NBC	2	1	1	1
CQ	2	1	1	1
TAC	2	1	1	1

	UH-1Y Unit CSP Requirements Detachment			
Core Skill Core Plus	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	6	3	3	3
TCT	4	2	2	2
REC	6	--	--	3
CAL	6	3	3	3
FCLP	6	3	3	3
SWD	4	2	2	2
ESC	4	2	2	2
OAS	4	2	2	2
NS HLL	6	3	3	3
ANSQ	4	2	2	2
ASPT	4	2	2	2
FAC(A)	1	--	--	1
ASPT*	2	1	1	1
SPMSN*	2	1	1	1
OAS*	2	1	1	1
DACM*	2	1	1	1
NBC*	2	1	1	1
CQ*	6	3	3	3
TAC*	2	--	--	1

(1) Events Required to Attain Individual CSP. To initially attain CSP, a UH-1Y crewmember must successfully complete all of the T&R events listed in the chart below for that core skill.

UH-1Y Pilot	TERF	TCT	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	SPMSN	OAS	DACM	NBC	CQ	TAC
T&R event requirement to attain CSP T&R event requirement to attain C+SP	200 201R	S210 S211R	S220 221R	230R 231 232R	S240 241R 242R	250 251 252R 253 254R	S260 261 262R 263R	S270 271R 272R 273R S320 322R 323R	201R 221R 231 232R 253 254R	S300 301R 302 303R S305R 306R	310 311R S312 313 314R 315 316R 317	330R 331R 332R 333R 334R	400 401 402R S403 404R 405R	S410R 411	S412R 413R S414R 415 416 417R	430 431 432R 434R 435R	S440R	450R 451R S452R	470

UH-1Y CC	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	OAS	DACM	NBC	CQ
T&R event requirement to attain CSP T&R event requirement to attain C+SP	200 201R	221R	230R 231 232R	241R 242R	251 252 253 254R 255R 256R	262R 263R	272R 273R 322R	201R 221R 231 232R 254R 255R 256R	301 302 303R 304R 305R 306R	310 311R 313 314R 315 316R	332R 333R	400 401 402R 404R 405R	416 417R	430R 431 432R 434R 435R	440R	450R 451R

UH-1Y AO	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	OAS	DACM	NBC	CQ
T&R event requirement to attain CSP T&R event requirement to attain C+SP	200 201R	221R	230R 232R	241R 242R	251 252 253 254R 255R 256R	263R	273R	201R 221R 232R 254R 255R 256R	301 302 303R 304R 305R 306R	314R 316R	332R 333R	404R	416 417R	430R 431 432R 434R 435R	440R	450R 451R

(2) Events Required to Maintain Individual CSP. To maintain CSP, an individual must maintain proficiency in all of the T&R events listed in the chart below for that core skill.

UH-1Y Pilot	TERF	TCT	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	SPMSN	OAS	DACM	NBC	CQ	TAC
T&R event requirement to maintain CSP T&R event requirement to maintain C+SP	201R	S211R	221R	232R	242R	254R	262R 263R	271R 273R 322R 323R	201R 232R 254R	303R 306R	311R 314R 316R	331R 333R 334R	402R 404R	S410R	S412R 413R 417R	430R 432R 435R	S440R	451R	470

UH-1Y CC	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	OAS	DACM	NBC	CQ
T&R event requirement to maintain CSP T&R event requirement to maintain C+SP	201R	221R	232R	242R	254R 255R 256R	262R 263R	273R 322R	201R 221R 232R 254R 255R 256R	303R 304R 305R 306R	311R 314R 316R	333R	402R 404R	417R	430R 432R 435R	440R	451R

UH-1Y AO	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	OAS	DACM	NBC	CQ
T&R event requirement to maintain CSP T&R event requirement to maintain C+SP	201R	221R	232R	242R	254R 255R 256R	263R	273R	201R 221R 232R 254R 255R 256R	303R 304R 305R 306R	314R 316R	333R	404R	417R	430R 432R 435R	440R	451R

b. Minimum Combat Leader Requirements. As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of UH-1Y aircrew with the listed flight leadership designations.

Designation	Squadron Pilot	Sqdn (Minus 1 Det) Pilots	Det Pilots
UHC	9	6	3
SEC LDR	5	3	2
DIV LDR	2	1	1
FLT LDR*	4	3	1
AMC*	4	3	1

*HML/A Requirement (may be filled by UH or AH pilot)

7. Qualifications and Designations Tables. The tables below delineate T&R events required attain initial qualifications and designations. All stage lectures, briefs, squadron training and prerequisites shall be complete prior to completing final events. Qualification and designation letters signed by the commanding officer shall be placed in individual NATOPS and APR/MPR jackets. Loss of proficiency in all qualification events of a core skill causes the associated qualification to be lost. Regaining a qualification requires completing all R coded syllabus events associated with that qualification.

Qualification	Initial Event Qualification Requirements
INSTRUMENT (RQRD-600)	IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
NATOPS (RQRD-601)	IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
FAM (RQRD-602)	Semi-annual EP simulator.
TERF (QUAL-610)	200, 201
NSQ HLL (QUAL-611)	201, 221, 231, 232, 253, 254
NSQ LLL (QUAL-612)	300, 301, 302, 303, 305, 306
FAC(A) (QUAL-613)	330, 331, 332, 333, 334
RWDACM (QUAL-614)	431, 432
FWDACM (QUAL-615)	434, 435
CQ (QUAL-616)	450, 451
TAC(A) (QUAL-617)	470

Designation	**Designation Requirements**
PQM (DESG-630)	Successful completion of NATOPS and instrument checks and CSIX 191.
UHC EVAL (DESG-631)	DESG-630 and IAW OPNAVINST 3710. Successful completion of the Core Skill Basic phase and the ANSQ and OAS stages of the Core Skill Advanced Phase through OAS-323.
FCP (DESG-632)	DESG-630 and IAW NATOPS and COMNAVAIRFORINST 4790.2. Upon completion of the DESG-632 evaluation flight, the Commanding Officer may designate the PUI a Functional Check Pilot.
SECTION LEAD EVAL (DESG-649)	DESG-631, 640, 641, 649E. PUI will fly any of the previously flown Core Skill Basic, Advanced or Plus sorties in conjunction with the 649 Tracking Code.
DIVISION LEAD EVAL (DESG-659)	DESG-649, 650, 651, 659E and IAW and UH-1Y NATOPS. The PUI will fly any of the previously flown Core Skill Advanced or Plus sorties in conjunction with the 659 Tracking Code.
FLIGHT LEAD EVAL (DESG-669)	DESG-659, 669E and IAW UH-1Y NATOPS. The PUI will fly any of the previously flown Core Skill Basic, Advanced or Plus sorties in conjunction with the 669 Tracking Code.
AMC EVAL (DESG-679)	Upon completion of the DESG-679 evaluation flight, the Commanding Officer may designate the PUI an Air Mission Commander (AMC).
BIP (IDSG-680)	500, 501, 502, 503, 504
TERFI (IDSG-681)	510, 511
WTO (IDSG-682)	520, 521, 522
FAC(A)I (IDSG-683)	540, 541
DACMI (IDSG-688)	580, 581, 582, 583
TAC(A)I (IDSG-689)	570
NSSI (IDSG-693)	552
NSFI (IDSG-694)	562
NSI (IDSG-696)	594
WTI (IDSG-699)	IAW MAWTS-1 WTI COURSE
SPECIFIC OPERATIONS TRACKING CODE	**Tracking Code Requirements** In addition to the above RQRD, DESG, and IDSG codes, the following tracking code is entered by Operations.
SOTC-713	Live Guided Rocket (APKWS or LOGIR)

8. Instructor Requirements. A squadron should possess the following numbers of UH-1Y aircrew with the listed instructor designations IAW the UH-1Y T&R and MCO 3500.12 (WTTP). The listed numbers are based on squadron core capability definition.

	Squadron		
INSTRUCTOR DESIGNATION	Pilots	Crew Chiefs	AO/AGs
BIP	4	--	--
TERFI	4	3	--
WTO	4	--	--
NSI	3	3	--
WTI	3	3	--
FAC(A)I	2	--	--
TAC(A)I	1	--	--
DACMI	2	2	--
C/C AGI	--	4	--

	Squadron (-)		
INSTRUCTOR DESIGNATION	Pilots	Crew Chiefs	AO/AGs
BIP	2	--	--
TERFI	2	2	--
WTO	2	--	--
NSI	2	2	--
WTI	2	2	--
FAC(A)I	1	--	--
TAC(A)I	1	--	--
DACMI	1	1	--
C/C AGI	--	3	--

	Detachment		
INSTRUCTOR DESIGNATION	Pilots	Crew Chiefs	AO/AGs
BIP	2	--	--
TERFI	2	1	--
WTO	2	--	--
NSI	1	1	--
WTI	1	1	--
FAC(A)I	1	--	--
TAC(A)I	0	--	--
DACMI	1	1	--
C/C AGI	--	1	--

9. Currency. A control measure used to provide an additional margin of safety based on exposure frequency to a particular skill. It is a measure of time since the last event demanding that specific skill. Loss of currency does not affect a loss of CRP. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for individual type mission profiles can be found in Chapter 4 of the Aviation T&R Program Manual.

10. Proficiency. Proficiency is a measure of achievement of a specific skill. Refly factors establish the maximum time between demonstration of those particular skills. CRP is a measurement of "demonstrated proficiency." If an aircrew member exceeds the refly factor for a particular event, the individual loses CRP for that particular event. To regain proficiency, an individual shall complete the delinquent events with a proficient crewman/flight lead. If an entire unit loses proficiency, unit instructors shall regain proficiency by completing an event with an instructor from a like unit. If not feasible, the instructor shall regain proficiency by completing the event with another instructor. If a unit has only one instructor and cannot complete the event with an instructor from another unit, he shall regain proficiency with another aircraft commander or as designated by his commanding officer.

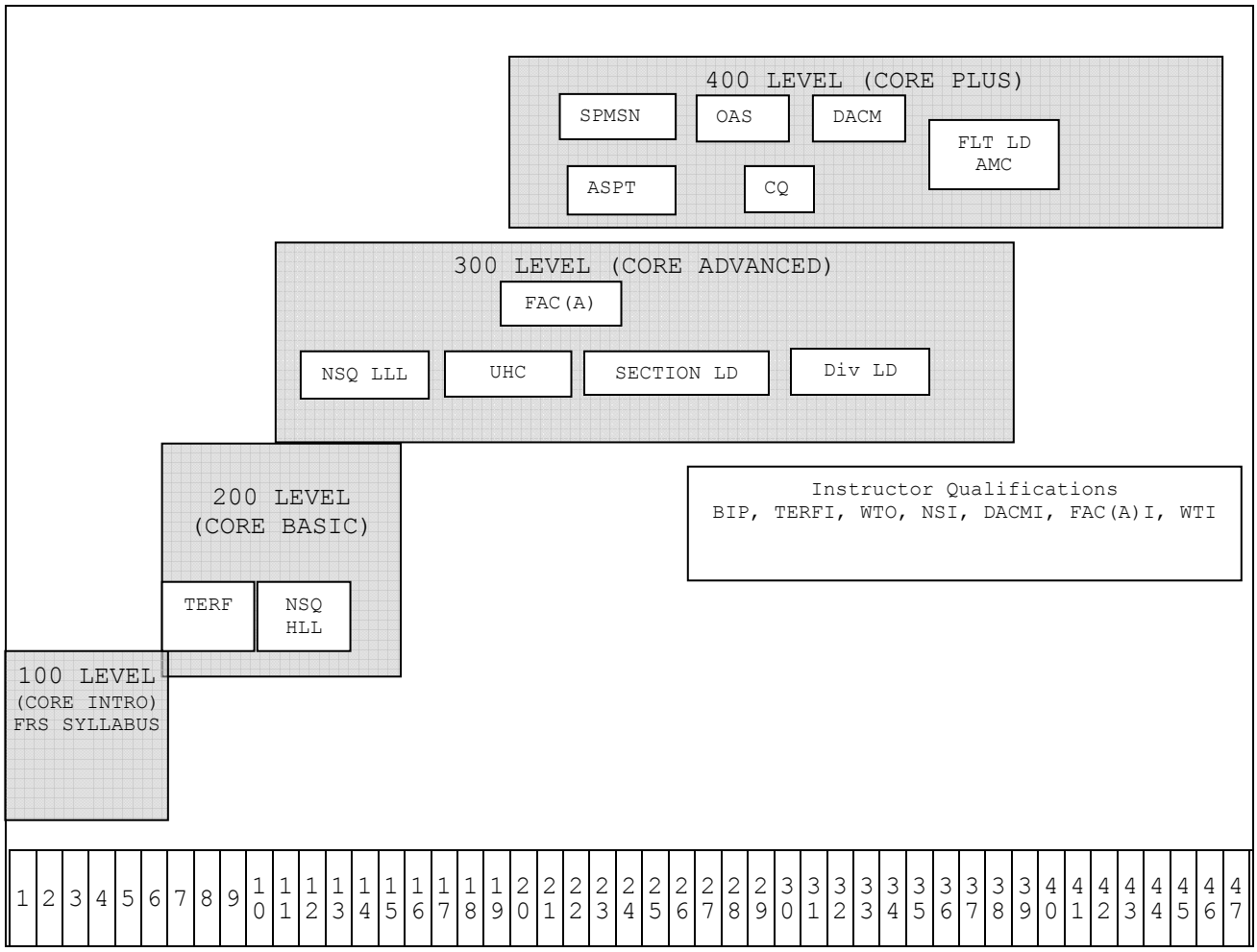

Figure 1-1.--UH-1Y Notional Training Progression Model.

101. PROGRAMS OF INSTRUCTION (POI) FOR BASIC AND TRANSITION PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Interactive Courseware	Training Squadron
3-22	Core Introduction Training	Training Squadron
23-42	Core Basic/Advanced Training	Tactical Squadron
43-52	Core Plus Training	Tactical Squadron

102. POI FOR REFRESHER PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Interactive Courseware	Training Squadron
3-8	Core Introduction Training	Training Squadron
9-16	Core Basic Training	Tactical Squadron
17-24	Core Advanced Training	Tactical Squadron
25-30	Core Plus Training	Tactical Squadron

103. POI FOR MODIFIED REFRESHER PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Interactive Courseware	Training Squadron
3-8	Core Introduction Training	Training Squadron
*	Core Basic/Advanced Training	Tactical Squadron
*	Core Plus Training	Tactical Squadron

* = Modified Refresher is FRS specific. Upon completion of the Modified Refresher POI, pilots shall follow the Refresher POI at the tactical squadron. Refer to paragraph 130.5.

104. POI FOR SERIES CONVERSION PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Interactive Courseware	Training Squadron
3-8	Core Introduction Training	Training Squadron
9-12	Core Basic Training	Tactical Squadron
13-14	Core Advanced Training	Tactical Squadron
15-17	Core Plus	Tactical Squadron

105. POI FOR FRS INSTRUCTOR PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-4	Instructor Pilot Flight Training	Training Squadron

120. GROUND/ACADEMIC TRAINING

1. Ground training requirements are listed separately for each phase of flight training. Training may be completed earlier in stage but should be completed by the appropriate sortie(s). Course descriptions are as follows:

a. Interactive Courseware (ICW). This is a Computer Based Training (CBT) syllabus for Core Skill Introduction training. It consists of both self-paced lesson and instructor-presented phase lectures.

b. Academic Support Package (ASP). These are MAWTS-1 prepared classes available on CD-ROM or the MAWTS-1 SIPR website. All material is contained on CDs or the website, both classified and unclassified. These can be either self-paced lessons or instructor-presented lectures. The classes listed are only the Generic, Common or Specific UH-1Y classes.

c. Computer Based Training. These are software and/or hardware computer training aids designed to augment training for specific systems. Examples include the Naval Air Warfare Center programs for CDU, as well as other programs developed by various sources such as the CDU Device Trainer, TISP, FTS, Mission Planning Software/JMPS, EOTDA, and ASE trainers/programs.

d. Squadron Developed Training. Squadron-developed curriculum used to enhance the above programs. Recognition training will be continuous.

121. GRADUATE LEVEL COURSES. There are 7 graduate level courses (DACMI, FAC(A)I, NSSI, NSFI, TAC(A)I, NSI, WTI) that qualify instructors for specific portions of the T&R syllabus. The requirements for these instructor certifications are contained in the MAWTS-1 Course Catalog.

130. GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS

1. General

a. The MAWTS-1 Course Catalog contains a summary matrix of all Ground, Academic, Simulator, and Flight requirements for each stage of the T&R. This matrix will be put in the Aircrew Performance Record (APR) of all aircrew to thoroughly track training progression. As each training event is completed, the PTO will input the date of completion.

b. All events, to include simulators, shall begin with a comprehensive brief with emphasis on administrative procedures, CRM, tactical procedures, mission performance standards and aircrew expectations.

c. All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance utilizing all evaluation techniques available (e.g., videotape, participating aircrews, external support personnel).

d. An ATF is required for any initial event completed by a Basic, Transition, Conversion, Refresher, Series Conversion, or as recommended by the squadron Standardization Board. If the commanding officer has waived/deferred a syllabus sortie, the squadron training officer shall place a waiver/deferral letter in section 3 of the APR. Standardized ATFs can be obtained by the T&R sponsor, MAWTS-1.

e. All pilots will have an APR. The squadron training officer shall ensure each ATF is entered in section 3 of the APR.

f. The T&R manual is the Marine Corps aircrew training document. It relates the training requirements and standards for Marine aircrew. When operational commanders assign HML/A squadrons to prolonged commitments where specific T&R training is not available (e.g., MEU deployments, sustained combat deployments), it is expected that degradation in some mission areas will occur. Commanding officers are authorized to defer training in specific missions that are not relevant to their current deployment situation. Once the squadron or detachment has returned from the deployment, every effort should be made to achieve the deferred training for the affected pilots.

g. Compliance with the written flight description is mandatory for syllabus event completion. Per Aviation T&R Program Manual, events may be listed as Aircraft preferred/Simulator optional - A/S, Simulator preferred/Aircraft optional - S/A, Aircraft only - A, or Simulator only - S. In the absence of a flight simulator, completion of a syllabus event is not required to complete that stage. Completion of those events should be accomplished as soon as practicable upon simulator availability. Should the command desire, simulator events can be flown in the aircraft for T&R credit. CRM will be stressed and evaluated throughout each stage.

h. Initial syllabus events not annotated with an "N" or "NS" shall be conducted during daylight hours. Simulator events annotated with "D/NS" require both day and night conditions during the hop, unless flown in the aircraft ("S/A"), in which case the event can be flown during day conditions. Pilots shall fly events annotated with an "N" (Night) or "NS" (Night Systems) at least 30 minutes after official sunset. Events annotated with "(NS)" may be flown during the day or at night. Events annotated with "N*" shall be flown at night unaided.

i. Events annotated as "S/A" that are flown in the aircraft may have external and/or ordnance requirements which are not listed to meet the requirements of the hop. For instance, an STCT hop flown in the aircraft will require expendables.

j. Networked Simulation. Linked simulator events require an approved tactical environment simulation and at least one additional, networked, man-in-the-loop simulator to meet the training objectives. A moving model controlled from the operator station does not satisfy the man-in-the-loop requirement.

2. T&R Phases

a. The 200-level phase is considered to be 'skill' level training. Completion of the 200-level phase should provide the UH-1Y aircrew with the skills required to execute UH-1Y missions that directly support the unit METL.

b. The 300-level phase is considered to be 'mission' level training. Completion of the 300-level phase ensures UH-1Y aircrew are trained to execute missions that support the unit METL.

c. The 400-level phase is considered "Core Plus" training. This phase contains UH-1Y training standards applicable to large scale integrated missions, unique mission areas, or mission areas having a low probability of execution. This phase also trains pilots to be capable of leading/directing flights of numerous aircraft in a complex wartime scenario. Although core plus training events may provide valuable training opportunities, they are not measured as part of the unit reporting.

d. The 500-level phase contains instructor workup and certification syllabus events.

e. The 600-level phase contains requirements, qualifications and designations syllabus events.

f. The 200 and 300-level phases are considered core skills and will be reported as such.

3. T&R Codes

a. In order to log a T&R code, aircrew must satisfactorily complete event requirements IAW assigned Mission Performance Standards. Logging multiple training codes on an initial single sortie shall be avoided. When scheduling sorties, training officers are allowed to schedule additional training codes based on anticipated mission sets if the Performance Standards are met for the sortie, and sufficient time is available during the flight to accomplish those sorties (e.g., 4 hour flight scheduled to conduct two sorties with flight time requirement of 2.0 hours each). If multiple syllabus events are to be accomplished during a single flight evolution, appropriate planning, briefing, and debriefing time must be allotted to ensure that requisite training objectives can be met.

4. Performance Standards

a. Performance standards are listed for each T&R event description. These are training standards for individual aircrew performance and should be utilized by the evaluator as a guideline to determine the satisfactory completion of each event. If the aircrew did not successfully attain the performance standards, the training code shall not be logged as a completed flight and CRP credit shall not be granted until proficiency is demonstrated.

b. All simulators and flight events will be planned, briefed, executed and debriefed IAW UH-1Y NATOPS, ANTTP/NTRP, OPNAVINST 3710, doctrinal publications, the RW TACSOP, and applicable SOPs.

5. Squadron Syllabus Assignment

a. General. The UH-1Y possesses aircraft systems and mission equipment to warrant formalized training for UH-1N pilots in the all phases of training, as opposed to direct introduction to squadron flight lines. In this respect, there are two key concepts identified for the community to effectively upgrade from the UH-1N to the UH-1Y.

(1) First, while the Huey fleet is in transition from legacy to upgrade aircraft, many pilots having previously completed the Basic POI for the UH-1N will be returning for their second, or subsequent, fleet tours for training in the UH-1Y. It is recognized that previous tactical experience in the UH-1N is applicable toward series conversion training in the UH-1Y. Previously trained UH-1N pilots will complete series conversion training at the FRS. Once FRS series conversion complete, the PUI will be assigned to the Refresher POI for training at the tactical squadron.

(2) Second, current UH-1N pilots performing Series Conversion to the UH-1Y, will event convert November events to Yankee events, in accordance with paragraph 170, Event Matrix, based on date last flown in the UH-1N.

This will be done regardless of event proficiency status in order for automated training management systems (SARA, M-SHARP) to function properly with respect to POI updating rules, from the aviation Program Manual, for Refresher. In accordance with POI updating rules, in order for all events in a stage to be updated once the R coded events for the stage have been flown, there has to be a previously flown date present, proficient or delinquent, otherwise the event will be recognized as incomplete and must be flown. Certain designations and qualifications, identified by the H-1 Transition Task Force as unaffected by the new aircraft's systems, may be grandfathered to the UH-1Y at the squadron CO's discretion. These cases are specified in Paragraph 6.

b. Basic and Transition Syllabus. Basic, Transition, and Conversion pilots are required to fly the entire syllabus. Refresher, Modified Refresher, and Series Conversion will fly the sorties designated by an "R", "M", and "SC" respectively in the event description.

c. Refresher Syllabus. A Refresher syllabus is provided for personnel returning to an operational squadron who have been previously assigned to the Basic POI of the UH-1Y. Experienced pilots (completed at least one fleet tour in an operational unit) returning to a squadron, who have not flown an UH-1Y for an extended period of time shall be place in the Refresher, or Modified Refresher, POI as follows:

(1) Regardless of the type of billet returning from, pilots having not flown the UH-1Y for ≤ 485 days will conduct Refresher training at the tactical unit.

(2) Pilots returning from a DIFOP billet, where a helicopter was flown, having not flown the UH-1Y for > 485 days will conduct Modified Refresher training at the FRS.

(3) Pilots returning from a DIFDEN billet, or a DIFOP billet where a helicopter was not flown, having not flown an UH-1Y for > 485 days but ≤ 730 days will conduct Modified Refresher training at the FRS.

(4) Regardless of the type of billet returning from, pilots having not flown the UH-1Y for > 730 days will conduct full Refresher training beginning at the FRS.

(5) This syllabus is predicated on the experience of the Refresher pilot. A pilot in the Refresher syllabus should fly all "R" coded events; however, a pilot need not fly every event within a stage of training to be requalified in that stage. The commanding officer may tailor the Refresher syllabus to fit the experience of the Refresher pilot per T&R Program Manual. When the "R" coded events within a stage of training are complete, the pilot may be credited with the CRP for the entire stage of training. This assumes that the Refresher has had previous proficiency in that stage of training. If the pilot has no previous proficiency in a stage or particular event, then the pilot should fly the entire stage or all events not previously flown. The Refresher syllabus applies only up to the stage achieved during the prior tour. After that the pilot will complete the entire remaining syllabus. Prerequisites apply only to replacement aircrew and not to Refresher pilots.

(6) Previously designated UH-1N pilots will be assigned to the Refresher POI upon completion of FRS Series Conversion training. After performing event conversion in accordance with paragraph 170, previously designated UH-1N pilots shall complete all R coded events that are delinquent or incomplete and any other (non R coded) events that are also incomplete. Incomplete events will either be new events, like OAS-272, with no direct comparison to a UH-1N event, or an event with no proficiency date because the pilot never performed it in the UH-1N or because there is no event conversion defined. Several 200+ events are identified as required events for a pilot to successfully continue the series conversion, post FRS, as a Refresher.

These events are not assigned an event conversion code from the November T&R regardless of any similarities that may exist. UH-1N pilots will have to fly them in the Yankee regardless of the date of a similar event last flown in the November. Automated training management systems will not automatically convert UH-1N sorties for proficiency in the UH-1Y. The pilot training officer will have to manually enter these dates, for each pilot, before commencing 200+ training in the Refresher POI at the tactical unit.

d. Modified Refresher Syllabus. A Modified Refresher syllabus, for pilots not requiring full Refresher, is provided to expedite training at the FRS. It can be individually tailored as specified by the commanding officer of the FRS. However, in no case will this syllabus be less than the minimum Modified Refresher syllabus shown here. Following the FRS, the Refresher should follow the Refresher syllabus described above; however, the commanding officer may tailor the Refresher syllabus to fit the experience of the Refresher pilot per T&R Program Manual.

e. Series Conversion Syllabus. A Series Conversion syllabus is provided for personnel with previous experience in the UH-1N. A pilot in the Series Conversion syllabus should fly all "SC" coded events. The Series Conversion Syllabus is predicated on the experience of the Series Conversion pilot and is primarily designed for the UH-1N pilot who has not been out of the UH-1N cockpit for longer than 485 days and is most likely beginning the series conversion within days of the last UH-1N flight. 80% of the series conversion pilots for the first four years of fleet introduction fall in this category. The commanding officer of the FRS may tailor the Series Conversion syllabus to fit the experience, and proficiency, of the Series Conversion pilot per T&R Program Manual. Five additional events are recommended for pilots requiring additional flights due to time out of the cockpit: FAM 100,102,112; SWD 162; TCT 170. For conversion from the UH-1Y to the UH-1N see the UH-1N T&R.

6. Qualifications and Designations for Series Conversion Pilots

a. For the UH-1N pilot who begins the UH-1Y Series Conversion within 485 days of the last UH-1N flight, the squadron commander may elect to carry forward the following "non-systems" related designations from the UH-1N to the UH-1Y once the pilot achieves UHC designation in the UH-1Y. Pilots who fall outside this parameter (485 days) will be considered on a case-by-case basis for carried forward designations. The provision assumes that the pilot attains UHC designation in a reasonable amount of time according to the POI.

- Air Mission Commander
- Flight Leader
- Division Leader
- Section Leader

b. The following table highlights additional requirements, beyond designated UHC, in order to regain status in other qualifications and designations (refer to Event Matrix and sortie descriptions):

Qual/Desig	Requirement
- FAC(A)	Designated SL, Proficient IAW T&R and JFAC(A) MOA
- RW DACM	DACM-432
- FW DACM	DACM-432
- CQ	CQ 450-452 Proficient
- TAC(A)	Qualified FAC(A), Designated AMC
- BIP	Designated SL, RQRD-602, BIP-500,501,504
- TERF(I)	Designated BIP
- WTO	Designated TERF(I), WTO-520,522
- DACM(I)	DACM Qualified, Designated WTO
- NSSI	ANSQ Proficient, Designated SAR HAC
- NSFI	ANSQ Proficient, Designated TERF(I)
- NSI	ANSQ Proficient, Designated WTO, NSI-594
- FAC(A)I	FAC(A) Qualified, Designated WTO, Designated NSI
- TAC(A)I	TAC(A) Qualified, Designated FAC(A)I
- WTI	Designated DL, Designated NSI

7. Aircrew Evaluation Flights. All pilots shall have an appropriate NATOPS evaluation form completed annually upon completion of the following:

a. NATOPS Check (CCX-191, RQRD-601). A designated NATOPS Instructor/Assistant NATOPS Instructor shall evaluate RQRD-601.

b. Instrument Check (RQRD-600). A designated Instrument Instructor who is a member of the Instrument Flight Board shall evaluate RQRD-600.

c. To the greatest extent possible, an annual E.P. review (RQRD-602) will be conducted in the same month as the annual NATOPS check (RQRD-601). In lieu of an UH-1Y simulator, the RQRD-602 may be conducted verbally by a qualified instructor pilot with the pilot under instruction in the aircraft cockpit.

8. Instructor Requirements

a. The minimum instructor requirements are listed in the crew requirements section of each event.

b. For simulator events, the requirement for a squadron Instructor Pilot (IP) in addition to the Certified Simulator Instructor is at the discretion of the squadron. When practical, a copilot should be scheduled with the PUI for Crew Resource Management (CRM) proficiency.

9. Event Completion. Compliance with the written event description is mandatory for syllabus event completion. Times indicated for each event are only recommendations.

10. Sequence. Training should be accomplished by flying events within a stage in sequence and stages in sequence when practical.

11. Definitions

a. Discuss

(1) The IP shall discuss a procedure or maneuver during the brief, inflight, or debrief.

(2) The PUI is responsible for knowledge of the applicable procedures prior to the briefing.

b. Demonstrate

(1) The IP performs the maneuver with accompanying description.

(2) The PUI observes the maneuver and is responsible for the knowledge of the procedures prior to the sortie.

c. Introduce

(1) At his option, the IP may perform the maneuver with an accompanying description, or he may coach the PUI through the maneuver without demonstration.

(2) The PUI shall perform the maneuver with coaching as necessary and is responsible for knowledge of the procedures prior to the sortie.

d. Review

(1) The IP observes and grades the maneuver without coaching the PUI. An airborne critique of PUI performance is at the option of the instructor.

(2) The PUI is expected to perform the maneuver without coaching and devoid of procedural error at a level acceptable to warrant progress into the next stage of training.

131. CORE SKILL INTRODUCTION PHASE

1. Purpose. To develop a Core Skill Introduction-complete copilot. At the completion of this phase the PUI will be designated Pilot Qualified in Model (PQM), NATOPS qualified and rate the 7563 MOS as specified in the CCX-191.

2. General. Completion of this phase meets the requirements for the PUI to be designated a PQM. At the discretion of the squadron commanding officer a letter designating the PUI as PQM shall be placed in the NATOPS jacket, APR and a tracking code of RQRD-601 shall be logged. The PUI will have gained proficiency in FAM, INST, FORM, TERF, NAV, SWD, TCT, and TAC. NVDs will be utilized during the FAM, FORM, TERF, NAV and TAC stages.

3. Familiarization (FAM)

a. Purpose. To develop familiarity with aircraft flight characteristics, limitations, and emergency procedures during day and night operations. To develop proficiency in all maneuvers and to instill basic CRM procedures throughout the familiarization stage.

b. General

(1) PUI must demonstrate proficiency with all shore based FAM procedures to include normal/emergency procedures and basic aircraft maneuvers. Additionally, the PUI must display a thorough knowledge of limitations and flight characteristics. During all stages, the PUI shall complete a weight and balance form before each sortie and present it to the IP for verification.

(2) Where seat position is optional, PUI should conduct half of the syllabus events from each seat to facilitate proficiency from both cockpit positions. IP should discuss CRM considerations for each cockpit position during each event.

(3) To facilitate training, CC/CCUI/QO may be included on any FAM stage flights, as required.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Interactive Courseware, preflight and postflight, flight procedures, maneuver descriptions, emergency procedures, course rules, familiarization stage lecture, Cockpit Resource Management training, NITE lab, open and closed-book NATOPS exams.

e. Flight and Simulator Event Training. (10 Sorties, 20.0 Hours/7 Simulator Periods, 10.5 Hours).

FAM-00 R,M,SC 1 UH-1Y STATIC

Goal. Demonstrate/Introduce Preflight and Postflight responsibilities.

Requirement

(1) Discuss maintenance department organization and the ADB. Demonstrate basic NALCOMIS functionality.

(2) Demonstrate preflight and postflight inspections, cockpit inspection, weight and balance computations, and emergency egress procedures.

(3) Power up aircraft on APU to demonstrate setup/display of MFD.

Prerequisites. Systems ICW complete.

Crew. BIP/PUI/CC.

FAM-000 1 UH-1Y STATIC

Goal. Review Preflight/Postflight responsibilities.

Requirement. PUI completes accurate weight and balance computation, screens the ADB, and conducts an aircraft preflight and postflight in accordance with UH-1Y NATOPS and MDG.

Performance Standards. Without input from the IP, PUI completes an accurate weight and balance computation, screens and understands the function of the ADB, and conducts aircraft preflight and postflight inspections IAW UH-1Y NATOPS and MDG.

Prerequisite. FAM-00.

Crew. BIP/PUI/CC.

SFAM-100 1.5 SC FTD S

Goal. LS- Introduce Flight Training Device (FTD) and Full Flight Simulator (FFS) operation.

Requirement

(1) Introduce basic simulator operation.

(2) Introduce MFD, CDNU, NTIS, HMSD, and HOCAS functionality and switchology.

(3) Demonstrate/introduce NATOPS checklist, to include pre-start, normal start, subsequent start, rotor brake start, buddy start, pneumatic start, post-start, takeoff, landing,

shutdown, instrument flight, engine wash, and hot/warm fueling checklists.

Performance Standards. IAW UH-1Y NATOPS and MDG.

Prerequisite. Familiarization ICW complete.

Crew. CSI/PUI.

SFAM-101 1.5 R,M,SC FTD S

Goal. RS- Introduce NATOPS checklists and ground procedures.

Requirement

(1) Demonstrate/Introduce standardized NATOPS Brief.

(2) Review NATOPS checklists, to include pre-start, normal start, subsequent start, , rotor brake start, buddy start, pneumatic start, post-start, takeoff, landing, shutdown, instrument flight, engine wash, and hot/warm fueling checklists.

(3) Demonstrate/introduce starting and ground emergency procedures.

Performance Standards. IAW NATOPS and MDG.

Prerequisites. SFAM-100.

Crew. CSI/PUI.

SFAM-102 1.5 FFS S

Goal RS – Introduce Familiarization maneuvers and Emergency Procedures.

Requirement

(1) Discuss all Maneuver Description Guide Familiarization stage procedures.

(2) Discuss ground and taxi emergencies.

(3) Discuss Cockpit Resource Management.

(4) Review start, takeoff and shutdown procedures.

(5) Introduce normal takeoff, no-hover takeoff, max power takeoff, normal approach, steep approach, quickstop, no-hover landing, and sliding landing.

(6) Introduce ground and taxi emergencies.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. SFAM-101.

Crew. CSI/PUI.

SFAM-103 1.5 R,M,SC FFS S

Goal. LS – Introduce Familiarization maneuvers and Emergency Procedures.

Requirement

(1) Discuss Automatic Flight Control System (AFCS) modes and functionality, autorotational characteristics and ditching procedures.

(2) Introduce single/dual engine related inflight emergencies, AFCS modes and functionality, practice autorotations, High Speed Low Level autorotations, and High Altitude Emergency (HAE) procedures.

(3) Review start, takeoff and shutdown procedures.(4) Review all previously introduced FAM maneuvers.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. SFAM-102.

Crew. CSI/PUI.

FAM-104 2.0 1 UH-1Y A

Goal. RS – Introduce Basic Familiarization maneuvers.

Requirement

(1) Discuss engine fires, HAE considerations, application of weight and balance computations, and hot/warm refueling procedures.

(2) Demonstrate/introduce starting procedures, Area FAM, Home Field pattern procedures, AFCS modes and practice autorotations.

(3) Demonstrate/introduce NALCOMIS procedures.

(4) Introduce low work, normal takeoff, no-hover takeoff, max power takeoff, normal approach, steep approach, quickstop, no-hover landing, and sliding landing.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. SFAM-103.

Crew. BIP/PUI/CC.

FAM-105 2.0 1 UH-1Y A

Goal. LS – Introduce Basic Emergency Procedure maneuvers.

Requirement

(1) Discuss Nr limitations and warning system, engine failure modes (Np Overspeed/Np Underspeed), compressor stall, and single engine approach considerations.

(2) Demonstrate AFCS failure and tail rotor malfunctions starting procedures in the aircraft.

(3) Demonstrate/introduce practice autorotations, High Speed Low Level autorotations, High Altitude Emergency (HAE) procedures, and single engine approaches. PUI to complete a minimum of 5 autorotations.

(4) Review all previously introduced FAM maneuvers and EPs.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-104.

Crew. BIP/PUI/CC.

FAM-106 2.0 R,M,SC 1 UH-1Y A

Goal. RS – Review Familiarization maneuvers.

Requirement

(1) Discuss starter system, electrical system and associated malfunctions, LDS, PAS, CMT. Discuss Confined Area Operations, DECU Lockout, and tail rotor malfunctions.

(2) Demonstrate/Introduce Confined Area Operations, EECU/DECU Lockout. and tail rotor malfunctions.

(3) Introduce tail rotor malfunctions, starting procedures in the aircraft.

(4) Introduce practice autorotations.

(5) Review all previously introduced FAM maneuvers and EPs. PUI to complete a minimum of 5 autorotations.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-105.

Crew. BIP/PUI/CC.

FAM-108 2.0 R SC 1 UH-1Y A

Goal. OS – Review Autorotations/High Altitude Emergencies.

Requirement

(1) Discuss Autorotations to a spot, the Flight Control System, hydraulic system, and associated malfunctions.

(2) Review all previously introduced FAM maneuvers and EPs. PUI to complete a minimum of 5 autorotations.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-106.

Crew. BIP/PUI/CC.

FAM-109 2.0 1 UH-1Y A N*

Goal. OS - Review Familiarization maneuvers.

Requirement

(1) Conduct Aircrew Performance Record review.

(2) Discuss dual engine failure, main drive shaft failure, c-box and transmission malfunctions, and the H/V diagram.

(3) Review all previously introduced FAM maneuvers. PUI to complete a minimum of 5 autorotations.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-108.

Crew. NSFI/PUI.

SFAM-110 1.5 R,M,SC FTD S

Goal. OS – Review Cockpit Resource Management.

Requirement

(1) Review CRM techniques and considerations.

(2) Two PUIs will act as aircrew during scenario based simulator exercise. PUI to conduct NATOPS brief.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-109, CRM Annual training complete.

Crew. CSI/PUI/PUI.

SFAM-111 1.5 FFS S NS

Goal. LS - Introduce Night Familiarization maneuvers.

Requirement

(1) Discuss electrical system and associated malfunctions, required equipment for night flight, crew day/crew rest requirements, and aircraft lighting and switchology.

(2) Introduce NVD low work, normal takeoff, normal approach, steep approach, practice autorotations, no-hover landings, single engine approach, tail rotor malfunctions, AFCS failure and DECU lockout.

Performance Standards. IAW the UH-1Y NATOPS, MDG and MAWTS-1 NVD Manual.

Prerequisites. FAM-110, Night lab complete.

Crew. CSI/PUI.

SFAM-112 1.5 SC FFS S NS

Goal. RS - Introduce NVD Familiarization maneuvers.

Requirement

(1) Discuss NVD emergencies and HMSD operation.

(2) Demonstrate shadowing, varied LUX levels, and NVD inadvertent IMC.

(3) Demonstrate the NVD brief.

(4) Review low work, normal takeoff, normal approach, steep approach, practice autorotations, no-hover landings, single engine approach, tail rotor malfunctions, AFCS failure and DECU lockout.

Performance Standards. IAW the UH-1Y NATOPS, MDG, and MAWTS-1 NVD Manual.

Prerequisites. FAM-111.

Crew. CSI/PUI.

FAM-113 2.0 1 UH-1Y A NS

Goal. LS - Introduce NVD Familiarization maneuvers.

Requirement

(1) Discuss the engine oil and chip detection system.

(2) Review NVD emergencies and HMSD operation. Introduce the NVD brief.

(3) Demonstrate/introduce low work, normal takeoff, normal approach, steep approach, practice autorotations, no-hover landings, single engine approach, tail rotor malfunctions, and DECU lockout.

(4) Review shadowing, varied LUX levels, and NVD inadvertent IMC utilizing the simulator.

(5) Review NVD low work, normal takeoff, normal approach, steep approach and no-hover landings. Introduce NVD practice autorotations, single engine approach, tail rotor malfunctions, and DECU lockout.

Performance Standards. IAW the UH-1Y NATOPS, MDG and MAWTS-1 NVD Manual.

Prerequisites. SFAM-112.

Crew. NSFI/PUI/CC.

FAM-114 2.0 R,M,SC 1 UH-1Y A NS

Goal. RS – Review NVD Familiarization maneuvers.

Requirement

(1) Discuss engine limitations, engine chip caution light, and the fuel system. Discuss the engine oil and chip detection system.

(2) Review all previously introduced NVD FAM maneuvers. Review the NVD brief.

(3) Review low work, normal takeoff, normal approach, steep approach, practice autorotations, no-hover landings, single engine approach, tail rotor malfunctions, and EECU lockout.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-113.

Crew. NSFI/PUI/CC.

FAM-115 2.0 1 UH-1Y A

Goal. LS – Review Familiarization maneuvers.

Requirement

(1) Discuss engine limitations, engine chip caution light, and the fuel system.

(2) Review all previously introduced FAM maneuvers.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-114.

Crew. BIP/PUI.

FAM-116 2.0 R,M,SC 1 UH-1Y A

Goal. RS – Review Familiarization maneuvers.

Requirement

(1) Discuss the Multifunction Display and Mission Computer operation.

(2) Review all previously introduced FAM maneuvers.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-115.

Crew. BIP/PUI/CC.

FAM-117 2.0 R,SC E 1 UH-1Y A

Goal. OS – Evaluate Familiarization maneuvers.

Requirement

(1) Discuss any aircraft limitation, emergency procedure, aircraft system.

(2) PUI shall give the NATOPS brief.

(3) Evaluate knowledge, proficiency, and safety considerations during execution of all FAM stage maneuvers.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-116.

Crew. ANI/PUI/CC.

4. Instruments (INST)

a. Purpose. To develop proficiency in actual/simulated instrument meteorological conditions (IMC).

b. General. Refresher pilots will complete their annual instrument check (RQRD-600) in conjunction with INST-124. Therefore, they will have completed the semi-annual minimums and instrument ground school prior to INST-124. Basic pilots whose instrument check will expire within three months of leaving the FRS will also meet the above requirements.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Instrument ICW and Instrument Ground School (as applicable).

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours, 3 simulator events, 4.5 hours).

SINST-120 1.5 FFS S

Goal. OS - Introduce Instrument Flight basic maneuvers.

Requirement

(1) Discuss instrument checklist, vertigo, unusual attitude recovery procedures, VMC-to-IMC transitions, IMC-to-VMC transitions, instrument autorotations, Instrument Takeoff (ITO) and standard rate indications.

(2) Introduce instrument checklist, ITOs, Standard Instrument Departures (SIDs), OSCAR patterns, recovery from unusual attitudes, and power recovery instrument autos.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-110 and Instrument ICW complete.

Crew. CSI/PUI.

SINST-121 1.5 R,SC FTD S

Goal. OS - Introduce Instrument Flight navigation procedures.

Requirement

(1) Discuss TACAN procedures, CDI operation, station passage, IAF, FAF, DME, holding and entry procedures, loss of TACAN during approach, Digital Flight Display (DFD) instrument flight, AN/APX(V)-100 transponder, MDA, missed approach procedures and use of GPS.

(2) Introduce DFD instrument flight and TACAN procedures (point-to-point, arcing, holding, and approach).

(3) Review instrument clearance procedures.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. INST-120.

Crew. CSI/PUI.

SINST-122 1.5 FTD S

Goal. OS – Introduce Ground Controlled Radar Approach procedures.

Requirement

(1) Discuss PAR/ASR procedures, NAVAID failure, lost communications procedures, and no-gyro approaches.

(2) Introduce ASR, PAR and no-gyro approaches.

(3) Review all previously introduced INST maneuvers.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. INST-120.

Crew. BIP/PUI/CC.

INST-123 2.0 1 UH-1Y A (N*)

Goal. OS – Introduce Night Instrument Flight Navigation procedures.

Requirement

(1) Preferably conducted at night.

(2) Discuss DD-175 filing criteria and procedures.

(3) Review all previously introduced INST maneuvers.

Performance Standards. IAW the UH-1Y NATOPS, and MDG.

Prerequisites. INST-120.

Crew. BIP/PUI/CC.

INST-124 2.0 R,M,SC E 1 UH-1Y A (N*)

Goal. OS – Evaluate Instrument Flight procedures.

Requirement

(1) Conduct PUI jacket review.

(2) Discuss instrument flight publications, airspace classification, cloud clearances and visibility requirements, inflight filing procedures, annual and semi-annual instrument and approach minimums, weather briefing requirements and spatial disorientation.

(3) PUI will plan and execute an instrument flight IAW OPNAV 3710. This sortie can fulfill requirements for annual instrument check if required and minimums have been met.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. INST-120-123.

Crew. IFBM/PUI/CC.

5. Formation (FORM)

a. Purpose. To introduce formation flight and develop proficiency in parade and tactical formation maneuvers.

b. General. At the completion of this stage, the PUI will be proficient at formation takeoffs and landings, rendezvous, parade, cruise, combat cruise, combat spread, lead change and all formation maneuvers listed in the UH-1Y NATOPS and MDG.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Formation stage lecture, UH-1Y TACMAN and ICW.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours/2 simulator events, 3.0 hours).

SFORM-130 1.5 2 FFS S (NS)

Goal. OS – Introduce Formation flight.

Requirement

(1) Discuss FORM maneuvers, visual signals, lead change procedures, and inadvertent IMC.

(2) Introduce parade and cruise formation flight, breakup and rendezvous, climbs/descents/crossovers, section approaches, and lead change procedures.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-110 and FORM ICW complete.

Crew. CSI/PUI.

FORM-131 2.0 R 2 UH-1Y A

Goal. OS - Introduce Formation and Tactical Formation flight.

Requirement

(1) Discuss lookout doctrine, wingman awareness, aircrew coordination within a section.

(2) Discuss combat cruise, combat spread, use of cover in turns, use of radius of turn and tactical formation maneuvers.

(3) Introduce parade and cruise formation flight, breakup and rendezvous, climbs/descents/crossovers, section approaches, and lead change procedures.

(4) Introduce Tactical Maneuvering and ordnance delivery patterns.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-130.

Crew. BIP/PUI/CC.

SFORM-132 1.5 LINKED FTD (3+ H-1) S/A

Goal. OS – Introduce Division formation flight.

Requirement

(1) Discuss division tactical formation maneuvers.

(2) Introduce division takeoff, rendezvous, cruise, and tactical formation maneuvers.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FORM-131.

Crew. CSI(BIP (DIV LDR))/PUI.

FORM-133 2.0 2 UH-1Y A NS

Goal. OS – Introduce NVD Formation flight.

Requirement

(1) Discuss NVD formation flight techniques and aircraft lighting considerations.

(2) Repeat FORM-131 utilizing NVDs.

Performance Standards. IAW the UH-1Y NATOPS, MDG and MAWTS-1 NVD Manual.

Prerequisite. FAM-114, FORM-131.

Crew. NSFI/PUI/CC.

6. Terrain Flight (TERF)

a. Purpose. To introduce low level, contour and NOE modes of TERF flight and develop proficiency in the application of TERF procedures.

b. General. PUI will demonstrate an understanding of the TERF modes (low level, contour, and NOE) and proficiency in low level, contour, and NOE flight maneuvers.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. TERF stage lecture, UH-1Y NATOPS, MDG and ICW.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours, 1 simulator event, 1.5 hours).

STERF-140 1.5 FFS S (NS)

Goal. LS – Introduce TERF maneuvers.

Requirement

(1) Discuss TERF modes of flight, performance checks, masking/unmasking, and safety “bubble” awareness.

(2) Introduce low level, contour and NOE modes of flight, performance checks, masking and unmasking, and NOE quick stops.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-110.

Crew. CSI/PUI.

TERF-141 2.0 R,M,SC 1 UH-1Y A

Goal. RS - Introduce TERF maneuvers.

Requirement

(1) Discuss engine failures in TERF environment, loss of tail rotor authority, negative/zero G maneuvers, and vortex ring state.

(2) Demonstrate the TERF brief.

(3) Review all previously introduced TERF maneuvers.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. STERF-140.

External Syllabus Support. TERF maneuvering area.

Crew. TERFI/PUI/CC.

TERF-142 2.0 R 1 UH-1Y A NS

Goal. LS - Introduce NVD TERF maneuvers.

Requirement

(1) Discuss NVD considerations in the TERF environment, terrain reflectivity, night visual cues, meteorological considerations, and NVD environmental considerations.

(2) Review TERF-141 utilizing NVDs.

Performance Standards. IAW the UH-1Y NATOPS, MDG, and MAWTS-1 NVD Manual.

Prerequisite. FAM-114, TERF-141.

External Syllabus Support. TERF maneuvering area.

Crew. NSFI/PUI/CC.

7. Navigation (NAV)

a. Purpose. To develop the ability to conduct day/night navigation.

b. General. PUI must demonstrate the ability to navigate preplanned routes and identify positions using both charts/maps and mission planning software/moving map display at altitude and in the TERF environment.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. NAV stage lecture, ICW, and CDU Part Task Trainer.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours, 1 simulator event, 1.5 hours).

SNAV-150 1.5 R,M,SC FTD S

Goal. OS – Introduce TAMMAC Navigation.

Requirement

(1) Discuss low level, contour, and NOE navigation, route selection, checkpoint selection, and map preparation of both the 1:250,000 Joint Operation Graphic (JOG) and 1:50,000 paper maps.

(2) Navigate a route in low level and contour flight of at least 5 checkpoints (20 NM minimum) followed by a transition to NOE flight and navigation of 4 additional checkpoints utilizing the 1:50,000 scale map.

(3) Demonstrate HAVEQUICK/SINCGARS operation.

Performance Standards. IAW the UH-1Y NATOPS and MDG. Remain oriented within 500 meters.

Prerequisites. FAM-110.

Crew. CSI/PUI.

NAV-151 2.0 2 UH-1Y A

Goal. OS – Introduce TAMMAC Navigation.

Requirement

(1) Discuss TAMMAC Moving map, mission planning, AWE and IAS interface with TAMMAC, startup, mission card/AMU upload, initializing, datum entry, alignment modes, waypoint entry, route building procedures, automated flight planning, and modes of operation.

(2) Introduce TAMMAC functionality.

(3) Introduce HAVEQUICK/SINCGARS operation.

(4) PUI will utilize mission planning software to create, upload, and navigate a route in low level and contour flight modes of at least 7 checkpoints (20 NM minimum) utilizing the moving map display in the appropriate scale. In addition to navigating the planned route, PUI is required to manually enter, and navigate, at least three waypoints at the end of the planned route. PUI will understand how to enter waypoints and routes manually in the event of a mission planning/upload software failure.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. TERF-141, SNAV-150.

External Syllabus Support. TERF navigation area.

Crew. BIP/PUI/CC.

NAV-152 2.0 2 UH-1Y A NS

Goal. OS - Introduce NVD navigation.

Requirement

(1) Discuss navigation in the night TERF environment, to include tactical considerations during route selection, checkpoint and limiting feature selection, navigation system

employment, and route briefing techniques.

(2) Introduce night TERF navigation on an approved TERF navigation route.

(3) Review operation of the navigation system. PUI will utilize mission planning software to create, upload, and navigate a route in contour and NOE flight modes of at least 7 checkpoints utilizing the moving map display in the appropriate scale. In addition to navigating planned waypoints, PUI is required to change two waypoints during the mission, one manually via the CDNU, and the other using the hook/select function. Once changed, navigate remainder of new route.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. TERF-142, NAV-151.

External Syllabus Support. Authorized TERF navigation area.

Crew. NSFI/PUI/CC.

8. Specific Weapons Delivery (SWD)

a. Purpose. To develop the ability to deliver air-to-ground weapons employing all available sensors and weapons systems, with particular emphasis on basic conventional weapons delivery.

b. General. At the completion of this stage, PUI will demonstrate familiarity with all ordnance delivery techniques.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. SWD stage lecture, ICW complete.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours, 1 simulator events, 1.5 hours).

SSWD-160 1.5 R,M,SC FTD S

Goal. OS - Introduce Basic Conventional Weapon Delivery.

Requirement

(1) Discuss ordnance checklists, emergency procedures, and the Helmet Mounted Sight Display.

(2) Introduce required switchology and standard delivery patterns during ordnance evolutions.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FAM-110.

Ordnance. If Simulator not available, (7) 2.75” rockets, (1500) 7.62mm GAU-17, (500) .50 Cal GAU-16.

Crew. CSI/PUI.

SWD-161 2.0 2 UH-1Y A

Goal. OS - Introduce Basic Conventional Weapon Delivery.

Requirement

(1) Discuss weapons preflight, loading, arming, dearming, safing, and jettison procedures.

(2) Introduce live fire ordnance training with particular emphasis on standardized cockpit resource management and weapons delivery accuracy.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. FORM-131, NAV-151, SSWD-160.

Ordnance. (7) 2.75" rockets, (1500) 7.62mm GAU-17, (500) .50 Cal GAU-16.

External Syllabus Support. Live fire range.

Crew. WTO/PUI/CC.

SWD-162 2.0 2 UH-1Y A

Goal. OS - Review Basic Conventional Weapon Delivery.

Requirement

(1) Discuss Multifunction Display operation, and rocket delivery systems.

(2) Review rocket delivery from diving and running fire with emphasis on weapon systems operation, all related emergencies, terminal control procedures, and range safety considerations.

Performance Standards. IAW the UH-1Y NATOPS, TACMAN and MDG.

Prerequisites. SWD-161.

Ordnance. (7) 2.75" rockets, (1500) 7.62mm GAU-17, (500) .50 Cal GAU-16.

External Syllabus Support. Live fire range.

Crew. WTO/PUI/CC.

9. Threat Counter-Tactics(TCT)

a. Purpose. To introduce offensive/defensive electronic and infrared countermeasures, and Aircraft Survivability Equipment (ASE).

b. General. At the completion of this stage, the PUI will be proficient at setup and operation of all aircraft survivability equipment.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. SWD stage lecture, ICW complete.

e. Flight and Simulator Event Training. (1 simulator event, 1.5 hours).

STCT-170 1.5 FTD/FFS S

Goal. OS - Introduce ASE operations.

Requirement. Introduce APR-39, AAR-47, and ALE-47 systems operation. Observe an entire threat missile engagement sequence with emphasis on system indications. Introduce threat radar systems and their associated APR-39 indications.

Performance Standards. Successfully operate (energize and BIT) and troubleshoot APR-39, AAR-47, and ALE-47 systems.

Prerequisites. FAM-110.

Crew. CSI/PUI.

10. Tactics (TAC)

a. Purpose. To demonstrate the ability to tactically employ aircraft weapon systems.

b. General. PUI will become familiar with applicable chapters of the UH-1Y TACMAN in preparation for this phase.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Tactics Phase Lectures and ICW.

e. Flight and Simulator Event Training. (4 sorties, 7.0 hours).

TAC-181 2.0 1 UH-1Y A

Goal. OS - Introduce confined area operations, to include HIE approaches.

Requirement

(1) Discuss power settling, single engine power, airspeed charts, height velocity diagram, landing zone brief, hover hold/hover box operations, dynamic rollover, power computations, and aircrew coordination with emphasis on crew chief briefs and utilization.

(2) Introduce confined area takeoffs/landings (to include steep approaches), HIE approaches, slope landings, hover hold/hover box operations, maximum power takeoffs, power checks (ground and airborne), and minimum rotor clearance approaches.

Performance Standards. IAW the UH-1Y ANTTP and MDG.

Prerequisite. FAM-110.

Crew. BIP/PUI/CC.

TAC-182 1.5 R,SC 1 UH-1Y A

Goal. OS - Introduce tactical CAL approaches.

Requirement

(1) Discuss threat conditions, tactical approaches and departures, HIE considerations, and high altitude operations and considerations.

(2) Introduce tactical approaches and departures in a low and high threat environment.

(3) Review confined area takeoffs, landings, slope landings and HIE approaches.

Performance Standards. IAW the UH-1Y ANTTP and MDG.

Prerequisite. TAC-181.

Crew. BIP/PUI/CC.

TAC-183 2.0 R,M,SC 1 UH-1Y A NS

Goal. OS - Introduce NVD CALs.

Requirement

(1) Discuss use of landing light, searchlight, brown out/white out, and effects of moisture.

(2) Introduce takeoffs, approaches, normal landings, slope landings to a confined area.

Performance Standards. IAW the UH-1Y ANTTP and MDG.

Prerequisite. FAM-114, TAC-182.

Crew. NSFI/PUI/CC.

TAC-184 1.5 1 UH-1Y A

Goal. OS - Introduce external load procedures.

Requirement

(1) Discuss engine failures, inadvertent IMC, hook/hoist capabilities/limitations, aircrew coordination, HST teams, ground crew brief, and load jettison.

(2) Introduce proper techniques for external and hoist pickup.

Performance Standards. IAW the UH-1Y NATOPS, and MDG.

Prerequisites. FAM-110.

Crew. BIP/PUI/CC.

11. Core Skill Introduction Check (CSIX)

a. Purpose. To review all areas of instruction, demonstrate proficiency and knowledge of all maneuvers to certify the PUI as PQM and Core Skill Introduction Stage complete.

b. General. The PUI will demonstrate proficiency through the Core Skill Introduction phase. Upon completion of the evaluation event, the PUI will be designated as PQM IAW UH-1Y NATOPS Chapter 5. CSIX-190/191 meets the qualifications for the 7563 MOS and will serve as the initial NATOPS evaluation (RQRD-601).

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. N/A.

e. Flight and Simulator Event Training. (1 sortie, 2.0 hours/1 simulator event, 1.5 hours).

SCSIX-190 1.5 R,M,SC E FFS S

Goal. OS - Emergency procedures trainer.

Requirement

(1) Discuss any aircraft limitation, emergency procedure, aircraft system.

(2) Review aircraft emergencies with emphasis on causes, indications, and procedures to recover aircraft. PUI will demonstrate knowledge, safety, and CRM considerations during the execution of emergency procedures.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. Core Skill Introduction phase complete.

Crew. CSI/PUI.

CSIX-191 2.0 R,M,SC E 1 UH-1Y A

Goal. OS - Core Skill Introduction Check.

Requirement

(1) Discuss responsibilities of the Pilot Qualified in Model (PQM) IAW OPNAV 3710.7.

(2) PUI must be able to safely demonstrate flight proficiency and knowledge of all maneuvers and procedures covered in the Combat Capable stage.

Performance Standards. IAW the UH-1Y NATOPS and MDG.

Prerequisites. SCSIX-190.

Crew. ANI/PUI/CC.

132. CORE SKILL BASIC PHASE

1. Purpose. To produce a TERF and NSQ (HLL) qualified copilot. The focus of training is combat proficiency.

2. General

a. Upon completion of this phase, the pilot will be TERF and NSQ (HLL) complete and may conduct additional missions as specified by the squadron commander. Crew served weapons listed for each event will be selected based on training requirements.

b. Completion of TERF-201 meets the requirements for the PUI to be TERF qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as TERF qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-610 shall be logged. Simulator and Simulator Preferred/Aircraft Optional sorties do not specify that a pilot be TERF Qualified (TERF-201 complete) prior to flying the sortie. However, if the decision is made to fly an S or S/A sortie in the aircraft, then the pilot will be TERF Qualified as a prerequisite.

c. Completion of TERF-201, REC-221, CAL-231 and 232, SWD-253 and 254 meets the requirements for the PUI to be Night Systems Qualified (HLL). At the discretion of the squadron commanding officer a letter assigning the PUI as NSQ (HLL) qualified shall be placed in the NATOPS jacket and APR, and a

tracking code of QUAL-611 shall be logged. The TCT, FCLP, ESC, and OAS stages are not required to be NSQ (HLL).

3. Ground Training. The ground training requirements are listed per stage of training, and must be completed prior to the associated stage or flight. Squadrons may schedule training earlier in phase to allow maximum student participation.

4. Terrain Flight/Navigation (TERF)

a. Purpose. To refine proficiency in terrain flight and navigation.

b. General. PUI shall be TERF qualified prior to proceeding to follow-on stages, to include simulator events. PUI will demonstrate proficiency in terrain flight and navigation. Once complete in this stage, the pilot may be TERF qualified (QUAL-610) in writing at the discretion of the commanding officer.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight/Simulator Training. (2 sorties, 4.0 hours).

TERF-200 2.0 2 H-1 A

Goal. OS - Review TERF maneuvers and navigation.

Requirement

(1) Discuss terrain appreciation, effective CRM/TRM during navigation, terminology, load computations and HIGE/HOGE requirements, rotary wing tactical SOP, terrain flight tactical application moving map navigational system use and operation, high gross weight handling characteristics and obstacle avoidance.

(2) Demonstrate/introduce all three modes of TERF, loading and operation of the moving map navigation system and proper CRM/TRM during TERF.

(3) PUI will conduct a route brief and conduct a minimum of 5 landings to an unimproved landing site.

(4) Conduct a navigation route with a minimum of 5 checkpoints utilizing a 1:50,000 scale map and aircraft systems, minimum length 20 NM.

Performance Standards. Remain oriented within 500 meters and within 1 minute of planned time. Conduct all TERF maneuvers IAW the UH-1Y NATOPS and ANTTP/NATIP.

External Syllabus Support. TERF route.

Crew. TERFI/PUI/CC/AO.

TERF-201 2.0 R E 2 H-1 A NS

Goal. OS - Review TERF maneuvers and navigation using NVDs.

Requirement

(1) Discuss SOP light configurations, NVD focus procedures, EPs at night, TERF maneuvers at night, NVD scan patterns,

effective CRM during navigation, and cultural lighting.

(2) Demonstrate/introduce proper NVD scan patterns, light configurations, NVD TERF flight/maneuvers, and effective CRM during navigation and obstacle avoidance.

(3) PUI will conduct a route brief. Conduct a minimum of 5 landings to an unimproved landing site.

(4) Conduct a navigation route with a minimum of 5 checkpoints utilizing a 1:50,000 scale map and aircraft systems, minimum length 20 NM.

Performance Standards. Remain oriented within 500 meters and within 1 minute of planned time. Conduct all TERF maneuvers IAW the UH-1Y NATOPS and ANTTP/NATIP.

Prerequisite. TERF-200.

External Syllabus Support. Authorized TERF route.

Crew. NSI/PUI/CC/AO.

5. Threat Counter Tactics (TCT)

a. Purpose. To introduce offensive/defensive electronic and infrared countermeasures, tactics, employment of Aircraft Survivability Equipment (ASE).

b. General. At the completion of this stage, the PUI will be proficient at setup, operation, and employment of all aircraft survivability equipment.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 simulator events, 3.0 hours).

STCT-210 1.5 FTD/FFS S (NS)

Goal. OS - Introduce ASE versus radar threats under both day and NVD conditions.

Requirement

(1) Discuss ALE-47 expendable characteristics.

(2) Introduce APR-39, AAR-47, and ALE-47 systems operation. Observe an entire threat missile engagement sequence with emphasis on system indications. Introduce threat radar systems and their associated APR-39 indications.

(3) Conduct a preplanned attack against an EW threat. Conduct a reactive attack against an EW threat.

(4) Conduct evasive maneuvers against an EW and IR threat.

(5) Conduct pre-emptive and reactive expendable use against an IR threat.

(6) This event will be flown under both day and night conditions (using NVDs).

Ordnance. If flown in aircraft: (30) chaff, (30) flares.

Performance Standards. Successfully operate (energize and BIT) and troubleshoot APR-39, AAR-47, and ALE-47 systems. Given a threat, load an appropriate ALE program. Correctly identify threat systems based on system visual/aural indications.

Crew. CSI(WTO)/PUI.

STCT-211 1.5 R 2 FTD/FFS S/A (NS)

Goal. OS - Introduce tactical employment of ASE versus RADAR and IR threats under both day and NVD conditions.

Requirement

(1) Review APR-39, AAR-47, and ALE-47 systems operation. Review threat IR SAM systems. Review ALE-47 expendable characteristics.

(2) Discuss the capabilities/limitations/weapon envelopes of potential threat systems, terrain profile analysis and related tactical considerations. Demonstrate maneuvers necessary to avoid detection from enemy infrared guided and optically tracked systems. Emphasize effectiveness of terrain masking to deny acquisition. PUI shall incorporate all ASE to assist in early threat detection and application of appropriate tactics.

(3) Utilize PFPS to plan a route based on threat avoidance.

(4) Conduct a preplanned attack against an EW threat.

(5) This event will be flown under both day and night conditions (using NVDs).

Performance Standards. Successfully operate and troubleshoot APR-39, AAR-47, and ALE-47 systems. Given a threat, load an appropriate ALE program. Correctly identify threat systems based on system visual/aural indications. Correctly perform appropriate evasive maneuvers and expendable release in response to surface to air threat.

Prerequisites. STCT-210.

Ordnance. If flown in aircraft: (30) chaff, (30) flares.

External Syllabus Support. If flown in aircraft: EW range, TRTG or remote radar emitter support and LASER safe range if available.

Crew. CSI(WTO)/PUI.

6. Reconnaissance (REC)

a. Purpose. To develop proficiency in reconnaissance operations.

b. General. The PUI will demonstrate proficiency in aircraft system employment for target detection, recognition and identification during reconnaissance operations. Emphasize sensor management during reconnaissance operations for target detection, recognition and identification.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (1 sortie, 2.0 hours and 1 simulator event, 1.5 hours).

SREC-220 1.5 FTD/FFS S (NS)

Goal. OS - Introduce visual reconnaissance under both day and NVD conditions.

Requirement

(1) Discuss NTIS components/switchology/functions, mission grip functions, use of the VTR, sensor management, basic VR techniques and a ground commander's Information Requirements (IRs).

(2) Demonstrate/Introduce MISREP procedures, traveling, traveling overwatch, bounding overwatch, intelligence collection and dissemination procedures.

(3) PUI will conduct reconnaissance, utilizing all four methods while performing overwatch procedures and proper use of the NTIS IAW the UH-1Y NATOPS and ANTTP/NATIP using a 1:50,000 scale map. Utilize all sensor modes of the NTIS. The VTR tape of the sortie should be used during the debrief as a measure of effectiveness.

Performance Standards. Correctly utilize the proper reconnaissance method to acquire and identify targets. Demonstrate proficiency of NTIS sensor modes and operation.

Crew. CSI(NSI)/PUI.

REC-221 2.0 R 2 H-1 A NS

Goal. OS - Review visual reconnaissance procedures.

Requirement. UH-1Y with operable VTR and NTIS.

(1) Review capabilities and limitations of the NTIS for detection/recognition/identification, ASE components/operation and proper techniques for adjusting the sensor suite for optimal performance under varying conditions.

(2) Review use of sensor performance prediction tools (EOTDA, TISP, and TAWS), use of HMSD acquire systems and the use of an IR laser pointer.

Performance Standards. Same as SREC-220.

Prerequisites. TERF-201, SREC-220.

External Syllabus Support. Authorized TERF area, thermally augmented threat vehicles if available.

Crew. NSI/PUI/CC/AO.

7. Confined Area Landings (CAL)

a. Purpose. To develop the ability to conduct section confined area takeoffs and landings and complete tactical approaches during day and night operations.

b. General. PUI must be TERF complete prior to beginning this stage. PUI must demonstrate the capability to safely takeoff and land in a confined area during day and night operations.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. CAL stage lectures (Squadron).

e. Flight/Simulator Training. (3 sorties, 6.0 hours).

CAL-230 2.0 R 2 UH-1Y A

Goal. OS - Perform section CALs.

Requirement

(1) Brief and discuss threat conditions, tactical approaches/departures. Review section tactical approaches into CAL sites from the lead and wingman positions. A minimum of 4 landings will be accomplished as lead and 4 landings will be accomplished as the wingman.

Performance Standards. PUI shall demonstrate safe basic airwork, sound judgment, and situational awareness in the lead and wingman positions.

Prerequisite. TERF-201.

Crew. BIP/PUI/CC.

CAL-231 2.0 2 UH-1Y A NS

Goal. OS - Perform section CAL approaches at night using NVDs.

Requirement

(1) Brief and discuss threat conditions, tactical approaches/departures, NVD/HMSD considerations and night operations. The introduction of NVD compatible landing zone lighting aids and the IR searchlight is recommended.

(2) Introduce night section tactical approaches into CAL sites in the lead and wingman positions. A minimum of 4 landings will be accomplished as lead and 4 landings will be accomplished as the wingman.

Performance Standards. PUI shall demonstrate safe basic airwork, sound judgment, and situational awareness in the lead and wingman positions.

Prerequisite. CAL-230.

Crew. NSI/PUI/CC/AO.

CAL-232 2.0 R 2 UH-1Y A NS

Goal. OS - Conduct section CALs and review section TERF maneuvers at night using NVDs.

Requirement. Conduct section tactical formation flight, CALs, tactical approaches, and section TERF maneuvering at night. A minimum of 4 landings will be accomplished as lead and 4 landings will be accomplished as the wingman. Evaluate

ability to safely conduct all previously covered NVD operations.

Performance Standards. PUI shall demonstrate safe basic airwork, sound judgment, and situational awareness in the lead and wingman positions.

Prerequisite. CAL-231.

External Syllabus Support. TERF area.

Crew. NSI/PUI/CC/AO.

7. Field Carrier Landing Practice (FCLP)

a. Purpose. To introduce flight operations from a carrier deck or air capable ship during the day and at night using the simulator and by introducing day and night FCLPs.

b. General. The IP will demonstrate/introduce proper communication procedures, patterns and aviation operations in the shipboard environment. Refer to appropriate NATOPS and LHA/LPH/LHD NATOPS manuals for shipboard operations.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 2.0 hours, 1 simulator event, 1.5 hours).

SFCLP-240 1.5 FFS S (N)

Goal. OS – Introduce day, night, and NVD shipboard operations.

Requirement

(1) Discuss the shipboard environment/procedures, EPs, Alpha, Charlie, and Delta patterns, shipboard instrument procedures, including TACAN, Carrier Controlled Approaches (CCA), marshals, lost comm. procedures, sight picture and landings to an L-class amphibious ship.

(2) Demonstrate/introduce patterns approaches, visual signals, communications and landings to an L-class amphibious ship.

(3) Conduct a minimum of 5 CQ landings of each type to an L-class amphibious ship.

Performance Standards. Per the UH-1Y NATOPS and shipboard NATOPS manuals.

Crew. BIP/PUI.

FCLP-241 1.0 R 1 UH-1Y A

Goal. OS – Introduce day FCLP operations.

Requirement

(1) Discuss air capable ships, shipboard specific crew coordination, LSE signals, emergency and ditching procedures, wind limitation charts, shipboard terminology, patterns,

entry/exit procedures, rotor brake start, HERO conditions and shipboard airspace.

(2) Demonstrate/introduce patterns, sight picture and landings to an FCLP deck.

(3) Conduct a rotor brake start and a minimum of 5 FCLP landings.

(4) Review shipboard EPs and patterns.

Performance Standards. Per the UH-1Y NATOPS and shipboard NATOPS manuals.

Prerequisites. SFCLP-240.

External Syllabus Support. FCLP pad.

Crew. BIP/PUI/CC.

FCLP-242 1.0 R 1 UH-1Y A NS

Goal. OS – Introduce night and NVD FCLP operations.

Requirement

(1) Discuss instrument scan, night/NVD patterns, shipboard crew coordination, comfort level, NVD failures and emergency procedures, lighting considerations, vertigo and shipboard instrument procedures.

(2) Demonstrate/introduce night unaided/NVD patterns, sight picture and landings to an FCLP deck.

(3) Review communication procedures and visual signals.

(4) Conduct a minimum of 5 unaided and 5 NVD landings.

Performance Standards. Per the UH-1Y NATOPS and shipboard NATOPS manuals.

Prerequisites. FCLP-241.

External Syllabus Support. FCLP pad.

Crew. NSI/PUI/CC/AO.

9. Specific Weapons Delivery (SWD)

a. Purpose. To develop proficiency in specific weapons delivery.

b. General. At the completion of this stage, the PUI will have displayed proficiency at delivering ordnance and proper use of the NTIS under all threat conditions. Emphasis will be on CRM while utilizing the ordnance systems.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 sorties, 8.0 hours, 1 simulator event, 1.5 hours).

SSWD-250 1.5 FFS S

Goal. OS – Introduce sensor employment in conjunction with SWD.

Requirement

(1) Discuss sensor employment, laser designation considerations, weapons checklists, attack patterns, FRAG patterns, sighting techniques, malfunction procedures, and use of ordnance delivery charts.

(2) Review procedures, aircrew coordination, weapon malfunctions/emergencies and delivery profiles. PUI shall conduct hover fire, running fire, diving fire, long range marking, illumination rocket delivery, and fixed forward gun delivery IAW the UH-1Y ANTTP/NATIP.

Performance Standards. Successful employment of the GAU-17 (fixed forward) at ranges from 500-1500 meters, exhibiting proper impact, detection, and adjustment. Successful employment of 2.75" rockets at ranges from 500-2000 meters, exhibiting proper impact, detection, and adjustment.

Ordnance. If flown in aircraft, (7) 2.75 inch HE, (3) 2.75 inch WP, (3) 2.75 inch Illum, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (10) chaff, (10) flares.

Crew. WTO/PUI.

SWD-251 2.0 2 H-1 A

Goal. OS - Conduct crew served weapons delivery.

Requirement

(1) Review sensor employment, weapons checklists, attack patterns, FRAG patterns, sighting techniques, malfunction procedures, and use of ordnance delivery charts.

(2) Review procedures, aircrew coordination, weapon malfunctions/emergencies and delivery profiles. PUI shall conduct crew served weapons delivery and attack profiles IAW the UH-1Y ANTTP/NATIP.

(3) Discuss ordnance and weapons nomenclature.

Performance Standards. PUI shall execute proper ordnance procedures and precise delivery profiles.

Prerequisite. TERF-201, SSWD-250.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (10) chaff, (10) flares.

External Syllabus Support. Live fire range and LASER safe range if available.

Crew. WTO/PUI/CC/AG.

SWD-252 2.0 R 2 H-1 A

Goal. OS - To develop proficiency at ordnance delivery.

Requirement

(1) Discuss weapon switchology with emphasis on ordnance trouble shooting, attack patterns, SOP ordnance procedures, use of rocket charts and delivery techniques, target fixation, ASE components/functions and rocket/gun related emergency procedures.

(2) Review ordnance procedures, aircrew coordination, weapons preflight, arming/dearming, and clear and safe procedures. Employ rockets, fixed forward guns and crew served weapons in running and diving fire. PUI shall conduct crew served weapons delivery and attack profiles IAW the UH-1Y ANTTP/NATIP.

(3) Review all ordnance emergencies, CRM during ordnance evolutions, and HMSD symbology.

Performance Standards. Successful employment of rockets at ranges from 500-2000 meters, exhibiting proper impact detection and adjustment to work towards effect on target while adhering to all range regulations.

Prerequisite. TERF-201, SSWD-250.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (10) chaff, (10) flares.

External Syllabus Support. Live fire range and LASER safe range if available.

Crew. WTO/PUI/CC/AG.

SWD-253 2.0 2 H-1 A NS

Goal. OS - To develop proficiency in crew served ordnance delivery using NVDs.

Requirement

(1) Brief and discuss section attack patterns, mutual support, IR CAS and IR pointer techniques, NVD sighting procedures, terminal control briefs and attack routing.

(2) Review ordnance procedures, effects of ordnance delivery on NVDs, and aircrew coordination.

(3) Review SWD-251 at night utilizing NVDs.

Performance Standards. PUI shall execute proper ordnance procedures and precise delivery profiles.

Prerequisite. SWD-251.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (10) chaff, (10) flares.

External Syllabus Support. Live fire range and LASER safe range if available.

Crew. NSI/PUI/CC/AG.

SWD-254 2.0 R 2 H-1 A NS

Goal. OS - To develop proficiency in ordnance delivery using NVDs.

Requirement

(1) Brief and discuss 2.75 inch rocket motors, warheads and fuses. Include illumination considerations, section attack patterns, mutual support, IR CAS and IR pointer techniques, NVD sighting procedures, terminal control briefs and attack routing.

(2) Demonstrate a RW CAS mission to include coordination with the terminal controller and section tactics. Review ordnance procedures, effects of ordnance delivery on NVDs, aircrew coordination, weapons preflight and arming/dearming.

(3) Employ rockets and door guns in running and diving fire.

(4) Review SWD-252 at night utilizing NVD's.

Performance Standards. Successful employment of rockets at ranges from 500-2000 meters, exhibiting proper impact detection and adjustment to work towards effect on target while adhering to all range regulations.

Prerequisite. SWD-252.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (10) chaff, (10) flares.

External Syllabus Support. Live fire range and LASER safe range if available.

Crew. NSI/PUI/CC/AG.

10. Escort (ESC)

a. Purpose. To develop proficiency in prescribed heliborne and surface escort formations and maneuvers.

b. General. The pilot will develop a working knowledge of escort formations, maneuvers, and techniques associated with heliborne and surface force operations. Ordnance is optional for this stage of training. If ordnance is utilized, the PUI shall have completed the SWD flight corresponding to the ordnance load.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight/Simulator Training. (3 sorties, 6.0 hours, 1 simulator event, 1.5 hours).

SESC-260 1.5 2 FFS S

Goal. OS - Demonstrate and introduce helicopter and surface escort procedures.

Requirement

(1) Discuss advantages/disadvantages of attached/detached escort, formations, sensor employment, LZ clearance/coverage techniques and procedures, threat reaction SOPs, immediate action procedures, and escort/assault support terminology.

(2) Discuss surface escort patterns and procedures.

(3) Demonstrate/introduce escort responsibilities and current tactical doctrine during assault support operations. Introduce attached/detached/combined/surface escort, escort/assault support mission planning and operations within the objective area/LZ.

Performance Standards. Exhibit a thorough understanding of escort responsibilities and assault support operations.

Ordnance. Optional if performed in aircraft. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (40) flares.

Crew. WTO/PUI.

ESC-261 2.0 2 H-1 A

Goal. OS - Demonstrate and introduce day helicopter escort.

Requirement

(1) Discuss night LZ clearance/coverage techniques and procedures, night escort techniques/procedures, lighting and threat detection, supporting arms coordination, fragmentation patterns, assault sectors of fire and escort/assault integration and deconfliction.

(2) Demonstrate/introduce tactical employment of ordnance in close proximity to assault helicopters enroute and in the LZ (objective area), LZ coverage patterns and ordnance delivery procedures.

Performance Standards. Exhibit a thorough understanding of helicopter escort responsibilities and assault support operations.

Prerequisite. TERF-201, SESC-260.

Ordnance. Optional. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (40) flares.

External Syllabus Support. One or more assault aircraft, and a live fire and LASER safe range (if required).

Crew. WTO/PUI/CC (AG).

ESC-262 2.0 R 2 H-1 A NS

Goal. OS - Demonstrate and introduce night helicopter escort using NVDs.

Requirement

(1) Discuss night LZ clearance/coverage techniques and procedures, night escort techniques/procedures, lighting and threat detection, supporting arms coordination, fragmentation patterns, assault sectors of fire and escort/assault integration and deconfliction.

(2) Demonstrate/introduce tactical employment of ordnance in close proximity to assault helicopters enroute and in the LZ (objective area), LZ coverage patterns and ordnance delivery procedures at night with NVDs.

Performance Standards. Exhibit a thorough understanding of night escort responsibilities and assault support operations.

Prerequisites. ESC-261.

Ordnance. Optional. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (40) flares.

External Syllabus Support. One or more assault aircraft and a live fire and LASER safe range (if required).

Crew. NSI/PUI/CC (AG).

ESC-263 2.0 R 2 H-1 A (NS)

Goal. OS - Introduce surface force escort operations.

Requirement

(1) Discuss surface force escort procedures and techniques. Emphasize tactical employment of ordnance in close proximity to surface vehicles, terminal controller procedures both in the enroute phase and in the objective area. Discuss ordnance fragmentation patterns, detailed fire support planning/integration with the supported unit. Introduce route coverage patterns, actions in the objective area and ordnance delivery techniques and procedures.

(2) Discuss capabilities/employment of rockets and crew served ordnance in support of GCE scheme of maneuver, METT-TSL requirements, escort fire support coordination, overwatch techniques, methods of escort, route and objective clearance/coverage techniques and procedures.

Performance Standards. Exhibit a thorough understanding of surface force escort responsibilities in support of the GCE scheme of maneuver.

Prerequisites. TERF-201, SESC-260.

Ordnance. Optional. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (40) flares.

External Syllabus Support. One ground/amphibious unit and a LASER safe range (if required).

Crew. WTO(NSI)/PUI/CC (AG).

11. Offensive Air Support (OAS)

a. Purpose. To develop proficiency in OAS under varying threat conditions.

b. General. The PUI will display proficiency in RW CAS in support of a ground unit.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (3 sorties, 6.0 hours and 1 simulator event, 1.5 hours).

SOAS-270 1.5 2 FFS S (NS)

Goal. OS - Provide RW CAS to ground forces during both day and NVD conditions.

Requirement

(1) Discuss plotting BPs, movement from HAs to BPs, objective area timing, CRM and lookout doctrine.

(2) Demonstrate/introduce a tactical RW CAS mission. Move from a low to medium threat environment during the sortie utilizing CAS mission briefs with and without target marks.

(3) Review all ordnance delivery procedures. Conduct a minimum of 5 RW CAS missions utilizing guns and rockets in support of a ground force.

Performance Standards. Exhibit a thorough understanding of the CAS mission brief and standard fire support coordination measures used when providing RW CAS.

Ordnance. I flown in aircraft, (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (40) flares.

Prerequisites. SREC-220, SSWD-250.

Crew. NSI/PUI.

OAS-271 2.0 R 2 H-1 A

Goal. OS - Provide RW CAS to ground forces.

Requirement

(1) Discuss objective area timing, attack and cover elements, UH-1Y weapons integration/synchronization with GCE assets, friendly marking techniques/procedures, identification of friendly/enemy positions and MACCS integration.

(2) Demonstrate/introduce a tactical RW CAS mission utilizing CAS mission briefs, with and without a mark, in a low to medium threat environment.

(3) Review FSC measures, terminal control, BP location, HA to BP movement, CRM principles during RW CAS and terminology. Conduct a minimum of 2 RW CAS missions utilizing CAS mission briefs.

Performance Standards. Exhibit a thorough understanding of the CAS mission brief. Ensure RW ordnance impacts within 30 seconds of the assigned TOT and follow-on ordnance effects are IAW the TACP directed adjustments.

Prerequisites. TERF-201, SWD-252, SOAS-270.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (40) flares.

External Syllabus Support. Live fire range, LASER safe range, TACP (if available).

Crew. WTO/PUI/CC/AG.

OAS-272 2.0 R 2 H-1 A/S (NS)

Goal. OS - Introduce RW CAS to ground forces in an urban environment.

Requirement

(1) Discuss aircraft flight profiles, weapon selection and ROE.

(2) PUI will coordinate, plan and conduct OAS brief. Develop a detailed fire support plan with ground force integration. Emphasize detailed coordination/planning for urban CAS, fire support coordination, GCE scheme of maneuver, targeting and marking considerations.

(3) Conduct urban navigation using non-standard maps and/or gridded reference graphic (if available). PUI will receive, coordinate and execute a minimum of 2 CAS missions.

Performance Standards. PUI will remain oriented within 1 city block for navigation.

Prerequisites. SOAS-270.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (60) flares.

External Syllabus Support. MOUT facility (live fire optional), TACP (if available).

Crew. WTO(NSI)/PUI/CC/AG.

OAS-273 2.0 R E 2 H-1 A NS

Goal. OS - To provide RW CAS to ground forces at night.

Requirement

(1) Discuss night/IR marking methods, employment capabilities of the NTIS, sensor management, terminal control procedures at night and CRM during night RW CAS missions.

(2) Demonstrate/introduce a tactical RW CAS mission at night with NVDs utilizing CAS mission briefs, in a low to medium threat environment.

(3) Review J-LASER terminology, IR pointer usage, friendly

marking techniques/procedures, identification of friendly/enemy positions and objective area timing. Conduct a minimum of 2 RW CAS missions at night with NVDs utilizing CAS mission briefs.

Performance Standards. Exhibit a thorough understanding of the CAS mission brief. Ensure RW ordnance impacts within 30 seconds of the assigned TOT and ensure ordnance effects are IAW the TACP directed adjustments.

Prerequisites. SWD-254, OAS-271.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (40) flares.

External Syllabus Support. Live fire range, LASER safe range, TACP (if available).

Crew. NSI/PUI/CC (AG).

133. CORE SKILL ADVANCED PHASE

1. Purpose. To produce a Core Skill Advanced pilot. Upon completion of the Core Skill Advanced Phase, pilots shall be proficient in all core skills.

2. General. Upon completion of the Core Skill Advanced phase, pilots may be designated NSQ (LLL), Utility Helicopter Commander (UHC), and Forward Air Controller Airborne [FAC(A)]. Crew served weapons listed for each event will be selected based on training requirements.

a. Completion of SANSQ-300 through ANSQ-306 meets the requirements for the PUI to be NSQ (LLL) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as NSQ (LLL) qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-612 shall be logged.

b. Completion of the FAC(A) stage meets the requirements for the PUI to be FAC(A) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as FAC(A) qualified shall be placed in the NATOPS jacket and APR and a tracking code of QUAL-613 shall be logged.

c. Completion of the Core Skill Basic phase, ANSQ, ASPT, and OAS stages through OAS-323 of the Core Skill Advanced phase meet the requirements for the PUI to be eligible for the UHC designation. Upon successful completion of any previously flown OAS or ASPT-314, 315, or 316 event, and at the discretion of the squadron commanding officer, a letter designating the PUI as a UHC shall be placed in the NATOPS jacket, APR and a tracking code of DESG-631 shall be logged.

3. Ground Training. The ground training requirements are listed per stage and must be completed prior to the associated stage/flight. Squadrons may schedule training earlier in stage to allow maximum student participation.

4. Advanced Night System Qualification (ANSQ)

a. Purpose. To develop proficiency during LLL operations.

b. General. Completion of SANSQ-300 through ANSQ-306 meets the requirements for the PUI to be NSQ (LLL). At the completion of the stage, the PUI will effectively employ the UH-1Y under LLL conditions, with troops and/or with ordnance. Once ANSQ stage complete, the pilot may be qualified in writing NSQ (LLL) by the squadron commander, and may complete the remaining Core Skill Advanced NVD training under any light level condition with the exception of ASPT-316, which must be LLL.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 sorties, 8.0 hours, 2 simulator events, 3.0 hours).

SANSQ-300 1.5 FTD/FFS S NS

Goal. RS - Perform NVD and aircraft emergency procedures during LLL conditions.

Requirement

(1) Discuss crew comfort during LLL NVG operations and LLL scheduling restrictions. Discuss NVD effects encountered during LLL conditions and the use of the searchlight (covert/overt) during emergency procedures.

(2) Introduce pattern work at unlit and lit landing sites. Introduce NVD/aircraft emergency procedures at unlit and lit landing sites. Introduce inadvertent IMC (IIMC) procedures.

(3) Conduct 5 landings at an unlit site, 5 landings at a lit site and 5 autorotations. Conduct NVD and aircraft emergencies. Conduct IIMC procedures.

Performance Standards. IAW UH-1Y NATOPS.

Prerequisites. NSQ(HLL).

Crew. CSI(NSI)/PUI.

ANSQ-301 2.0 R 1 UH-1Y A NS

Goal. RS - Perform NVD low work, pattern work and navigation during LLL conditions.

Requirement

(1) Discuss map preparation, checkpoint selection, and cultural lighting, aircraft external lighting configurations and options.

(2) Introduce basic low work and pattern work at an unlit field or remote landing site free from artificial illumination. Introduce NVD navigation techniques by planning and navigating a 5 checkpoint route utilizing a 1:250,000 map.

(3) Conduct 5 landings at an unlit field or remote landing site free from artificial illumination.

Performance Standards. Navigate a route consisting of a minimum of 5 checkpoints and 50 nautical miles remaining oriented within 1 NM of flight planned route. Arrive at final checkpoint within 1 minute of assigned time. Utilize GPS for at least 2 legs of the route if available.

Prerequisite. SANSQ-300.

External Syllabus Support. Unlit field or remote landing site free from artificial illumination.

Crew. NSI/PUI/CC/AO.

ANSQ-302 2.0 2 UH-1Y A/S NS

Goal. OS - Develop proficiency in tactical formation flight and TERF navigation during LLL conditions.

Requirement

(1) Discuss LLL formation flight considerations, hazards and night systems integration.

(2) Introduce tactical formation flight and navigation utilizing NVDs in low level, contour and NOE flight modes.

(3) Review TERF maneuvers in LLL conditions, crew comfort level and external aircraft lighting. Plan and navigate a route of at least 5 checkpoints utilizing a 1:50,000 map.

(4) Conduct TERF maneuvers and section formation flight in both the tactical lead and tactical wingman positions.

Performance Standards. Navigate a route utilizing a 1:50,000 map remaining oriented within 100 meters of planned route.

Prerequisites. ANSQ-301.

External Syllabus Support. TERF area and route.

Crew. NSI/PUI/CC/AO.

ANSQ-303 2.0 R 2 UH-1Y A NS

Goal. OS – Review NAV, CALS, and section tactics under LLL conditions.

Requirement

(1) Brief and discuss IMC, external aircraft lighting, hazards and night systems integration.

(2) Conduct section CALs and section tactics using NVDs in the low level, contour, and NOE flight modes. Perform a minimum of 4 CALs as lead and 4 CALS as the wingman.

(3) NTIS equipped aircraft required if available.

Performance Standards. PUI will perform maneuvers IAW UH-1Y ANTTP and MAWTS-1 NVD Manual.

Prerequisite. ANSQ-301.

Ordnance. N/A.

External Syllabus Support. TERF area.

Crew. NSI/PUI/CC/AO.

SANSQ-305 1.5 R FTD/FFS S NS

Goal. OS – Introduce ordnance delivery during LLL conditions.

Requirement

(1) Discuss penetration checklist procedures and techniques. Discuss LLL target acquisition difficulties, LLL ordnance

delivery effects, LLL ordnance delivery scan techniques, HMD symbology with respect to target handoff techniques and declutter modes and SOP arming/dearming procedures.

(2) Introduce ordnance delivery utilizing running and diving fire and ordnance emergencies.

Performance Standards. Conduct arm/dearm procedures and penetration/depenetration checklists IAW TACSOP and local directives. Detect and engage both point and area targets utilizing fixed forward guns and rocket attacks. Achieve suppressive effects on assigned targets during each engagement. Conduct proper actions in response to inflight ordnance emergencies.

Prerequisites. ANSQ-301.

Ordnance. If flown in aircraft, (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

Crew. NSI/PUI.

ANSQ-306 2.0 R E 2 H-1 A NS

Goal. OS – Review ordnance delivery during LLL conditions.

Requirement Conduct APR/NATOPS/logbook review in preparation for NSQ (LLL) designation.

(1) Review ordnance nomenclature and rocket warhead/fuse combinations. Discuss LLL target acquisition difficulties, LLL ordnance delivery effects, LLL ordnance delivery scan techniques, HMSD symbology with respect to target handoff techniques, declutter modes and SOP arming/dearming procedures.

(2) Review ordnance delivery utilizing running and diving fire and ordnance emergencies.

Performance Standards. Achieve suppressive effects on assigned targets during each engagement.

Prerequisites. SANSQ-300 and 305, ANSQ-301,302, and 303.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares, crew served mounted IR pointers.

External Syllabus Support. Live fire range and LASER safe range if available.

Crew. NSI/PUI/CC/AG.

5. Assault Support Operations (ASPT)

a. Purpose. To develop the ability to perform fastrope, insert/extract, TRAP and NVD escort, and command and control (C&C) operations.

b. General. Upon the completion of each ASPT event the pilot will be considered capable of performing that particular mission profile.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review the applicable MAWTS-1 Courseware and corresponding chapter of the UH-1Y ANTTP/NATIP.

e. Flight and Simulator Event Training. (7 sorties, 14.0 hours, 1 simulator event, 1.5 hours).

ASPT-310 2.0 1 UH-1Y A

Goal. OS - Develop proficiency in fastrope/rappel operations.

Requirement. Brief and discuss aircraft rigging, insert techniques, aircrew coordination, and emergencies.

Performance Standards. PUI will perform maneuvers IAW the UH-1Y ANTTP/NATIP, HIE Manual and local orders.

External Syllabus Support. HRST Master, ropers.

Crew. BIP/PUI/CC.

ASPT-311 2.0 R 1 UH-1Y A NS

Goal. OS - Introduce techniques for fastrope/rappel operations at night.

Requirement. Brief and discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies. Complete three insertions of at least two ropers.

Performance Standards. Perform HIE maneuvers IAW UH-1Y ANTTP/NATIP.

Prerequisite. CAL-232, ASPT-310, (ANSQ-306 if LLL).

External Syllabus Support. HRST Master and two ropers.

Crew. NSI/PUI/CC/AO.

SASPT-312 1.5 2 FTD/FFS S (NS)

Goal. OS - Tactically employ UH-1Y for utility support ISO of a troops in contact insert/extract mission under day and night conditions.

Requirement. Conduct a heliborne assault in a nonpermissive and MINCOM environment.

Performance Standards. PUI shall brief and lead IAW the UH-1Y ANTTP/NATIP.

Prerequisite. CAL-232.

Ordnance. If flown in aircraft, Optional. Configuration should reflect appropriate mission profiles. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

Crew. NSI/PUI.

ASPT-313 2.0 2 UH-1Y A (NS)

Goal. OS – Tactically employ UH-1Y for utility support ISO ground forces in an urban environment during day or NVD conditions.

Requirement

(1) Discuss aircraft flight profiles, weapon selection, ROE, Urban Grid Target System, IR CAS procedures, escort and urban heliborne assault considerations.

(2) Conduct urban navigation using non-standard maps (if available). Emphasize optimal use of aircraft systems in the conduct of a MOUT mission.

Performance Standards. PUI will remain oriented within 1 city block for navigation. PUI shall brief and lead IAW the UH-1Y ANTTP/NATIP.

Prerequisites. OAS-272, ASPT-312.

Ordnance. Optional. Configuration should reflect appropriate mission profiles. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. As required based on availability and local directives.

Crew. WTO(NSI)/PUI/CC/AO(AG).

ASPT-314 2.0 R 2 UH-1Y A NS

Goal. OS - Tactically employ UH-1Y for utility support ISO of a troops in contact insert/extract mission at night.

Requirement. Conduct a heliborne assault in a non-permissive and MINCOM environment.

Performance Standards. PUI shall brief and lead IAW the UH-1Y ANTTP/NATIP.

Prerequisite. CAL-232, ASPT-312, (ANSQ-306 if LLL).

Ordnance. Optional. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. Embarked troops.

Crew. NSI/PUI.

ASPT-315 2.0 2 H-1 A (NS)

Goal. OS – Conduct Tactical Recovery of Aircraft and Personnel(TRAP) mission.

Requirement

(1) Brief/discuss aircrew coordination, comfort levels, situational awareness during a TRAP mission.

(2) Discuss ISOPREP and authentication procedures for downed survivor.

(3) Discuss threat zones and RW TACSOP TRAP matrix.

Performance Standards. PUI shall brief and lead IAW the UH-1Y ANTTP/NATIP.

Prerequisite. CAL-232.

Ordnance. Optional. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. Downed aircrew.

Crew. WTO(NSI)/PUI(CC/AO).

ASPT-316 2.0 R 2 H-1 A NS

Goal. OS - Refine night tactical helicopter escort during LLL conditions.

Requirement. PUI shall conduct EFL brief.

(1) Discuss TACSOP enroute threat reaction requirements, LLL escort techniques, principles and LLL LZ clearance/coverage techniques and procedures.

(2) Review a tactical assault support mission in a low to medium threat environment and fire support planning/integration of supporting arms ISO assault support operations.

(3) Conduct escort of assault support aircraft with at least 25 NM of attached flight. Conduct clearance of LZ for assault ingress. Utilize IR pointer to alert crews to a simulated enemy position in the objective area. Integrate assault support weapons fires into the fire support plan.

Performance Standards. IAW UH-1Y ANTTP/NATIP.

Prerequisites. ESC-262.

Ordnance. Optional. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. 2 or more assault helicopters.

Crew. NSI/PUI/CC/AO.

ASPT-317 2.0 1 UH-1Y A (NS)

Goal. OS - Tactically employ the UH-1Y during a command and control mission.

Requirement. Brief and discuss crew coordination, radio setup, and radio responsibilities during a command and control mission.

Performance Standards. IAW UH-1Y ANTTP/NATIP.

Prerequisite. CAL-232.

Crew. WTO(NSI)/PUI/CC/AG.

6. Offensive Air Support (OAS)

a. Purpose. To develop the procedures and skill to tactically employ the aircraft during OAS missions.

b. General. Upon completion of this stage the pilot will be proficient in the planning, briefing and execution aspects of OAS missions. In

addition, the pilot will be proficient in the operation and employment of all organic weapon systems. Pilots shall be 200 level complete prior to stage initiation.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours, 1 simulator event, 1.5 hours).

SOAS-320 1.5 2 FFS S/A (NS)

Goal. OS - Tactically employ the UH-1Y in a low to medium threat environment during the conduct of an OAS mission.

Requirement. Event will be flown in the simulator as a section. PUI shall brief the weaponeering portion of the OAS brief.

(1) Discuss ATO and ACEOI utilization and high, medium, and low threat levels.

(2) Introduce JMEMs use as part of mission planning, sensor performance prediction tools (TAWS/EOTDA/TISP) relative to mission planning and cockpit setup with regard to real world complement of mission essential equipment.

(3) Conduct a tactical mission in a low to medium threat environment.

Performance Standards. Achieve delivery of 2.75 inch rockets and crew served weapons within 50 meters of target area.

Prerequisites. 200 level complete.

Ordnance. If flown in aircraft: (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (40) flares.

External Syllabus Support. If flown in aircraft: live fire range, LASER safe range.

Crew. WTO (NSI)/PUI.

OAS-322 2.0 R 2 H-1 A (NS)

Goal. OS - Provide CAS to ground forces.

Requirement

(1) Introduce integration of FW CAS assets into objective area mechanics. IP shall develop and brief FAC(A) game plan in support of the OAS brief. Introduce elevation analysis and line of sight communication considerations as a part of mission planning. Introduce EPA.

(2) Review integration of attack helicopters into the ground scheme of maneuver and fire support coordination measures.

(3) Conduct CAS in a low to medium threat environment. Utilize mission planning software to conduct elevation analysis and line of sight communication considerations.

(4) PUI shall brief elevation analysis and Evasive Plan of Action (EPA) in support of the OAS brief.

Performance Standards. PUI shall coordinate combined attacks (FW and RW) in support of ground scheme of maneuver. Deliver ordnance within CEP using 2.75 inch rockets and crew served weapons within 30 seconds of TOT during the initial engagement.

Prerequisites. SOAS-320, (ANSQ-306 if LLL).

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. Live fire range and LASER safe range.

Crew. WTO (NSI)/PUI/CC/AG.

OAS-323 2.0 R 2 H-1 A NS

Goal. OS - Introduce battlefield illumination in support of an OAS mission in a low to medium threat environment.

Requirement. PUI shall brief route portion of OAS brief. PUI shall brief preplanned illumination template.

(1) Discuss wind and elevation effects on illumination, other sources of battlefield artificial illumination, use of EGI to enhance accuracy of illumination delivery, illumination types and characteristics (both overt and covert) and use of the mission planning system.

(2) Introduce illumination delivery profiles.

(3) Conduct illumination rocket delivery.

Performance Standards. Achievement of desired illumination effects (as stipulated in OAS brief) will be debriefed by flight lead.

Prerequisites. ANSQ-306 (if flown LLL), SOAS-320.

Ordnance. (7) 2.75 inch illumination rockets, (40) chaff and (20) flares.

External Syllabus Support. Live fire range and LASER safe range.

Crew. NSI/PUI/CC/AG.

7. Forward Air Controller (Airborne) [FAC(A)]

a. Purpose. To qualify PUI as a FAC(A) in accordance with applicable directives.

b. General

(1) At the completion of this stage, the PUI will have demonstrated a thorough knowledge of JCAS and FAC(A) procedures used to control FW aircraft and supporting arms under varied environmental and threat conditions. At the completion of this stage the PUI will have met the certification requirements of the Joint FAC(A) MOA. The PUI may be designated a FAC(A) by the squadron commanding officer and will be assigned the Tracking Code of QUAL-613.

Outlined requirements are listed in the JCAS AP MOA- JFAC(A) dated 24 March 2005, and the T&R Program Manual Chapter 4. The JFAC(A) MOA can be found on the SIPRNET at: http://jfaca.mawts1.usmc.smil.mil.

(2) Prior to beginning this stage, pilots shall be designated Section Leader (DESG-649).

(3) Nonqualified aircrew will fly all sorties with a FAC(A)I. The FAC(A)I may simulate the ground FAC if one is not available.

(4) Upon successful completion of this stage of training through FAC(A)-334 and compliance with JFAC(A) MOA certification requirements, the commanding officer may issue a T&R FAC(A) qualification as well as a JFAC(A) MOA FAC(A) certification.

(5) Per the JFAC(A) MOA, the currency requirement to conduct FAC(A) is a minimum of 2 controls every 90 days. To regain currency (remain qualified) once expired, the next FAC(A) sortie must be flown with a current FAC(A). JFAC(A) MOA currency/proficiency requirements will be met by meeting T&R proficiency (refly) requirements. After initial certification, pilot training officers should schedule FAC-331 at night, as required, to fulfill JFAC(A) MOA requirements. If a FAC(A) loses T&R proficiency, then the sorties required to regain T&R proficiency must be flown with a FAC(A)I. If a FAC(A) has not flown a FAC(A) sortie in more than 18 months, then the entire syllabus must be reflown with a FAC(A)I. The intent of the T&R refly intervals is to meet the JFAC(A) MOA minimum requirements for currency/proficiency controls:

JFAC(A) MOA Requirements				
Interval	**Total Controls**	**Type 1**	**Night**	**Ordnance**
90 days	2	*	*	*
180 days	6	4	1	1
* No specified requirements in these areas for this interval				

(6) An aircraft control for the purpose of defining requirements is a mission that ends with a "cleared hot," "continue dry," or "abort" issued from the terminal controller. For a FAC(A) sortie flown with a FAC(A)I and PUI, where terminal control is conducted by the PUI, credit for each control will go to both pilots based on the instructor having ultimate responsibility for the conduct of the mission. For a FAC(A) sortie flown with both pilots in an aircraft FAC(A) qualified, credit will go to both pilots in the aircraft conducting the control in recognition of the importance of solid crew resource management when conducting FAC(A).

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 sorties, 8.0 hours, 1 simulator event, 1.5 hours).

SFACA-330 1.5 R FTD/FFS S/A (NS)

Goal. OS – Introduce indirect fire supporting arms control under both day and NVD conditions.

Requirement

(1) Discuss capabilities and limitations of indirect fire assets, SEAD procedures and LASER call for fire procedures.

(2) Introduce call for fire procedures. PUI will control indirect fire assets.

(3) Conduct a minimum of 3 fire missions, 2 of which shall be adjust fire missions.

Performance Standards. IAW UH-1Y ANTTP, MAWTS-1 FAC(A) handbook and J-PUB 3-09.3 (JCAS).

Prerequisites. DESG-649.

External Syllabus Support. If flown in aircraft: live fire range, indirect fire asset (mortars/artillery/NSFS), LASER safe range if available.

Crew. FAC(A)I/PUI.

FACA-331 2.0 R 2 H-1 A (NS)

Goal. OS – Introduce control of RW aircraft.

Requirement. UH-1Y with operable NTIS.

(1) Discuss RW aircraft ordnance capabilities and limitations, crew coordination, task shedding and task sharing in the FAC(A) arena.

(2) Introduce integration of RW CAS assets into objective area mechanics and communication and control procedures. PUI will control RW CAS assets.

(3) Conduct a minimum of (2) type 1, (1) type 2, and (1) type 3 control.

Performance Standards. IAW UH-1Y ANTTP, MAWTS-1 FAC(A) handbook and J-PUB 3-09.3 (JCAS).

Prerequisites. DESG-649.

Ordnance. (7) 2.75 inch WP rockets.

External Syllabus Support. 2 RW CAS aircraft with ordnance (HE or Inert), live fire range and LASER safe range.

Crew. FAC(A)I/PUI/CC(AO).

FACA-332 2.0 R 2 H-1 A

Goal. OS – Introduce control of FW aircraft.

Requirement. UH-1Y with operable NTIS.

(1) Discuss FW aircraft ordnance capabilities and limitations, crew coordination, task shedding and task sharing in the FAC(A) arena.

(2) Introduce integration of FW CAS assets into objective area mechanics and communication and control procedures. PUI will control FW CAS assets.

(3) Conduct a minimum of (4) type 1 controls.

Performance Standards. IAW UH-1Y ANTTP, MAWTS-1 FAC(A) handbook and J-PUB 3-09.3 (JCAS).

Prerequisites. DESG-649.

Ordnance. (7) 2.75 inch WP rockets.

External Syllabus Support. 2 FW CAS aircraft with ordnance (HE or Inert), live fire range and LASER safe range.

Crew. FAC(A)I/PUI/CC/AO.

FACA-333 2.0 R 2 H-1 A NS

Goal. OS – Introduce control of FW aircraft at night.

Requirement. UH-1Y with operable NTIS. PUI will brief a FAC(A) game plan.

(1) Discuss FW aircraft sensor capabilities and limitations.

(2) Review integration of FW CAS assets into objective area mechanics, communication and control procedures, crew coordination, task shedding and task sharing in the FAC(A) arena. PUI will control FW CAS assets.

(3) Conduct a minimum of (4) type 1 controls.

Performance Standards. IAW UH-1Y ANTTP, MAWTS-1 FAC(A) handbook and J-PUB 3-09.3 (JCAS).

Prerequisites. DESG-649.

Ordnance. (7) 2.75 inch WP rockets and IR pointer.

External Syllabus Support. 2 FW CAS aircraft with ordnance (HE or Inert), live fire range and LASER safe range.

Crew. FAC(A)I/PUI/CC/AO.

FACA-334 2.0 R E 2 H-1 (NS)

Goal. OS – Review supporting arms consolidation.

Requirement. UH-1Y with operable NTIS. Pilot will brief a FAC(A) game plan.

(1) Discuss fire support planning documents (target list worksheet, scheduling worksheet) weapon-to-target match.

(2) Review integration of multiple supporting arms assets into objective area mechanics and SEAD procedures. PUI will coordinate SEAD in support of FW target engagement.

(3) Conduct a minimum of (4) FW controls ((2) type 1, (2) type 2).

Performance Standards. IAW UH-1Y ANTTP, MAWTS-1 FAC(A) handbook and J-PUB 3-09.3 (JCAS).

Prerequisites. DESG-649. FACA 330-333.

Ordnance. (7) 2.75 inch WP rockets.

External Syllabus Support. 2 FW CAS aircraft with ordnance (HE or Inert), 1 indirect fire asset or 1 section of RW aircraft separate from flight, live fire range and LASER safe range.

Crew. FAC(A)I/PUI/CC/AO.

134. CORE SKILL PLUS PHASE

1. Purpose. To certify the PUI in large scale integrated mission events; events having unique mission taskings; events having a low probability of execution in combat, or relatively high risk events.

2. General

a. Completion of the RWDACM stage meets the requirements for the PUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-614 shall be logged. Crew served weapons listed for each event will be selected based on training requirements.

b. Completion of the FWDACM stage meets the requirements for the PUI to be DACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as DACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-615 shall be logged.

c. Completion of the CQ stage meets the requirement for the PUI to be CQ qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as carrier qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-616 shall be logged.

3. Assault Support (ASPT)

a. Purpose. To develop the ability to perform HIE operations.

b. General. Upon the completion of each event the pilot will be considered capable of performing that particular mission.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review the applicable MAWTS-1 Courseware and corresponding chapter of the UH-1Y ANTTP/NATIP.

e. Flight and Simulator Event Training. (5 sorties, 7.5 hours, 1 simulator event, 1.5 hours).

ASPT-400 1.0 1 UH-1Y A (NS)

Goal. OS - Introduce techniques for paradrops operations.

Requirement. Brief and discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies. PUI shall conduct paradrops with at least two jumpers.

Performance Standards. Perform paradrop maneuvers IAW the UH-1Y ANTTP/NATIP and appropriate HIE Manual.

External Syllabus Support. Jump Master and two jumpers.

Crew. BIP/PUI/CC (NSI/PUI/CC/AO).

ASPT-401 1.5 1 UH-1Y A

Goal. OS - Introduce techniques for water insertion.

Requirement. Brief and discuss aircraft rigging, insertion and extraction techniques, aircrew coordination, and emergencies. PUI shall insert two sticks of two swimmers.

Performance Standards. Perform HIE maneuvers IAW the UH-1Y ANTTP/NATIP and appropriate HIE Manual.

Crew. BIP/PUI/CC.

ASPT-402 1.5 R 1 UH-1Y A

Goal. OS - Introduce techniques for insertion/extraction using the Special Personnel Insertion/Extraction (SPIE) rig or Jacob's Ladder.

Requirement. Brief and discuss aircraft rigging, insertion and extraction techniques, aircrew coordination, and emergencies. Complete three evolutions consisting of an extract, transition to flight, and insert.

Performance Standards. Perform HIE maneuvers IAW UH-1Y ANTTP/NATIP and appropriate HIE Manual.

Prerequisite. TERF-201.

External Syllabus Support. HRST Master and two ropers.

Crew. BIP/PUI/CC.

SASPT-403 1.5 FTD/FFS S

Goal. OS - Introduce Mountain Area Landings.

Requirement. Brief and discuss high altitude operations, loss of tail rotor effectiveness, turbulence, orographic lifting, and downdrafts.

Performance Standards. Perform 5 mountain area landings and 2 simulated HIE approaches in a mountain environment.

Prerequisite. TERF-201.

Crew. CSI(BIP)/PUI.

ASPT-404 2.0 R 1 UH-1Y A (NS)

Goal. OS - Review Mountain Area Landings.

Requirement. Brief and discuss high altitude operations, loss of tail rotor effectiveness, turbulence, orographic lifting, and downdrafts.

Performance Standards. Perform 5 mountain area landings and 2 simulated HIE approaches in a mountain environment.

Prerequisite. SASPT-403.

Crew. BIP(NSI)/PUI/CC.

ASPT-405 1.5 R 1 UH-1Y A

Goal. OS - Introduce techniques for emergency rescue hoist/external loads procedures.

Requirement

(1) Brief and discuss engine failures, tail rotor emergencies, settling with power, aircraft rigging, hoist capabilities, aircrew coordination, HST procedures and operation, ground crew brief, emergencies, and load jettison.

(2) Demonstrate/introduce proper techniques for hoist pickup.

(3) Complete three iterations of hoist procedures (pick-up, hoist, recovery).

Performance Standards. Conduct flight and hoist procedures IAW the UH-1Y ANTTP/NATIP, and local directives.

Prerequisite. TERF-201.

External Syllabus Support. Appropriate external weight.

Crew. BIP/PUI/CC (AO).

4. Special Mission (SPMSN)

a. Purpose. Conduct specialized day and night tactical missions IAW MCCRES/MEUSOC standards in a permissive or non-permissive environment.

b. General. Upon the completion of each event the pilot will be considered capable of performing that particular mission.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review the applicable MAWTS-1 Courseware and corresponding chapter of the UH-1Y ANTTP/NATIP.

e. Flight and Simulator Event Training. (1 sortie, 1.5 hours, 1 simulator event, 1.5 hours).

SSPMSN-410 1.5 R FTD/FSS S (NS)

Goal. OS - Introduce techniques for SAR/over land techniques and hoist operations.

Requirement. Brief and discuss SAR patterns and hoist recovery techniques.

Performance Standards. Perform SAR maneuvers IAW UH-1Y ANTTP/NATIP and appropriate HIE Manual.

Prerequisite. ASPT-405.

Crew. CSI(NSI)/PUI.

SPMSN-411 1.5 1 UH-1Y A (NS)

Goal. OS - Introduce techniques for sniper operations.

Requirement. Brief and discuss sniper operations and planning and employment considerations.

Performance Standards. Perform sniper operations IAW UH-1Y ANTTP/NATIP.

Prerequisite. SWD-251, (SWD-253 if flown at night).

Ordnance. Optional. Configuration based on mission profile/requirements. (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. Approved gunnery range. MSPF/Sniper personnel embarked if available.

Crew. WTO(NSI)/PUI/CC/AO.

5. Offensive Air Support (OAS)

a. Purpose. To refine proficiency in OAS missions.

b. General. At the completion of this stage, the PUI will have demonstrated the ability to integrate FW and RW aircraft in the execution of OAS missions under varied environmental and threat conditions.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 sorties, 8.0 hours, 2 simulator events, 3.0 hours).

SOAS-412 1.5 R 2 FTD/FSS S/A

Goal. OS - Demonstrate and introduce AIC or GCI intercept of a surface/airborne threat.

Requirement. Event will be flown as a section in the simulator.

(1) Discuss radar/fire control capabilities of friendly and aggressor platforms, standard intercept controller terminology, weaponeering, EDATF procedures and alert status.

(2) Demonstrate and introduce AIC/GCI procedures.

(3) Conduct detailed coordination with radar controller and a minimum of 2 successful intercepts.

Performance Standards. Intercepts will terminate in either accurate target identification or simulated engagement.

External Syllabus Support. If flown in aircraft: AIC/GCI platform, controller, and a surface/air aggressor.

Crew. CSI(WTO)/PUI.

OAS-413 2.0 R 2 H-1 A (NS)

Goal. OS - Refine armed escort responsibilities during assault support operations in a medium to high threat environment.

Requirement

(1) Discuss integration of fires in the objective area.

(2) Plan, brief and lead an armed escort flight under a medium to high threat environment. Emphasize tactical employment of ordnance enroute and in the objective area, lookout doctrine, integration of fires, escort flight responsibilities, terminal area considerations, weaponeering and assault gunner procedures. Integrate all available supporting assets. Develop and execute a fire support plan during the initial assault wave.

Performance Standards. Correctly react to 1 or more simulated enroute threats to the assault flight IAW RWTACSOP.

Prerequisites. DESG-649.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. 2 or more assault helicopters. Live fire range.

Crew. WTO(NSI)/PUI/CC/AG.

SOAS-414 1.5 R 2 FTD/FFS S/A (NS)

Goal. OS - Conduct an Armed Reconnaissance mission.

Requirement. Event will be flown as a section in the simulator.

(1) Discuss threat radar planning considerations with the emphasis on mission planning systems, radar terrain masking and radar resolution cell.

(2) Discuss Global Area Reference System (GARS) and killboxes.

(3) Plan, brief and lead an armed reconnaissance mission in a medium to high threat environment. Emphasize flight leadership, terminal area target information collection and reporting, detailed objective area planning, coordinated weapons employment, ROE and supporting arms integration (if available).

Performance Standards. PUI will provide accurate and timely reports during conduct of the mission. PUI will locate and effectively engage a minimum of 2 targets IAW briefed ROE.

Prerequisites. DESG-649.

Ordnance. If flow in aircraft, (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. If flown in aircraft: live fire and LASER safe range.

Crew. WTO(NSI)/PUI.

OAS-415 2.0 2 H-1 A (NS)

Goal. OS - Conduct a Strike Coordination and Reconnaissance (SCAR) mission in a medium to high threat environment.

Requirement

(1) Discuss MACCS integration for deep battle operations, EA-6B capabilities/limitations and the IPB process.

(2) Discuss Global Area Reference System (GARS) and killboxes.

(3) Plan, brief and lead a SCAR mission in a medium to high threat environment. Emphasize target acquisition and target reporting. Coordinate available air assets to prosecute approved targets.

Performance Standards. PUI will locate a minimum of 2 targets and coordinate the engagement of those targets by other OAS assets.

Prerequisites. DESG-649.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. 2 OAS aircraft, live fire range and LASER safe range if available.

Crew. WTO(NSI)/PUI/CC/AG.

OAS-416 2.0 2 H-1 A

Goal. OS – Conduct OAS in an urban environment.

Requirement

(1) Discuss aircraft flight profiles, weapon selection and ROE.

(2) PUI will coordinate, plan and conduct OAS brief. Develop a detailed fire support plan with ground force integration. Emphasize detailed coordination/planning for urban OAS, fire support coordination, GCE scheme of maneuver, targeting and marking considerations.

(3) Conduct urban targeting using some type of gridded reference graphic (GRG). PUI will receive, coordinate and execute a minimum of 2 CAS mission.

Performance Standards. PUI will remain oriented within 1 city block for navigation. Correctly identify target based on GRG talk-on.

Prerequisites. OAS-272, DESG-631.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (60) flares.

External Syllabus Support. 1 FAC qualified ground controller with appropriate marking devices (if available), suitable urban environment or MOUT facility.

Crew. WTO/PUI/CC/AG.

OAS-417 2.0 R 2 H-1 A NS

Goal. OS - Conduct OAS in an urban environment at night.

Requirement

(1) Discuss aircraft flight profiles, weapon selection, ROE, Urban Grid Target System, IR CAS procedures, escort and urban heliborne assault considerations.

(2) Conduct targeting using some type of gridded reference graphic (GRG). Emphasize optimal use of aircraft systems in the conduct of a MOUT mission. PUI will receive, coordinate and execute a minimum of 2 CAS mission.

Performance Standards. PUI will remain oriented within 1 city block for navigation. Correctly identify target based on GRG talk-on.

Prerequisites. OAS-416.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. 1 FAC qualified ground controller with appropriate marking devices (if available), suitable urban environment or MOUT facility.

Crew. NSI/PUI/CC/AG.

6. Rotary Wing Defensive Air Combat Maneuvering (RWDACM)

a. Purpose. To demonstrate and introduce RWDACM and qualify the PUI as RWDACM complete.

b. General. At the completion of this phase, the PUI will be proficient in the conduct of the principles of RWDACM and have a thorough knowledge of weapons employment, aircraft control, and threat tactics of RW adversaries. Until a CC/AO door gunner simulator linked to the UH-1Y simulator is available for training, DACM-430 is not required for RWDACM stage completion.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours, 1 simulator event, 1.5 hours).

SDACM-430 1.5 1 UH-1Y S/A

Goal. OS - Introduce air-to-air gunnery.

Requirement

(1) Discuss weapon systems, lead distance, angles and air-to-air gunnery techniques.

(2) Introduce ordnance delivery in a variety of aspect angles versus moving targets.

Performance Standards. IAW UH-1Y ANTTP/NATIP.

Prerequisite. SWD-251.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240.

External Syllabus Support. Unless a suitable door gunner simulator is available, the following are required: High bird for shadow gunnery, Towed dart/ banner, shadow target, Moving Land Target, or Stationary Land Target, and a live fire range.

Crew. WTO/PUI/CC/AG.

DACM-431 2.0 1 UH-1Y A

Goal. OS - Perform 1 v 1 RWDACM.

Requirement

(1) Discuss concepts of energy maneuverability and specific excess power and their applicability to tactical considerations; concepts of the high and low yo-yo and the appropriate counter tactics to these maneuvers; weapons employment rules of thumb; range estimation techniques; line number setups; DACM training rules; crew coordination, aircraft control and flight leadership.

(2) Introduce capabilities/limitations and weapons envelopes of adversary RW aircraft.

(3) Conduct one complete line number sequence. Maintain aircraft control within NATOPS limitations.

Performance Standards. Execute reactive maneuvers to RW threat attacks.

Prerequisite. None.

Ordnance. Crew served weapons, TACTS pod if available, (30) flares.

External Syllabus Support. One adversary helicopter and appropriate air-to-air training area.

Crew. DACMI/PUI/CC/AO.

DACM-432 2.0 R E 2 H-1 A

Goal. OS - Perform 2 v 1 helicopter DACM maneuvering.

Requirement

(1) Discuss weapons employment rules of thumb, range estimation techniques, line number setups, and DACM training rules; crew coordination, aircraft control and flight leadership; section tactics and roles and responsibilities of free and engaged; concept of the weave.

(2) Review capabilities/limitations and weapons envelopes of adversary RW aircraft. Review the concepts of energy maneuverability and specific excess power and their applicability to tactical considerations.

(3) Conduct one complete line number sequence (from both tactical lead and tactical wingman positions).

Performance Standards. Execute reactive maneuvers to RW threat attacks.

Prerequisite. DACM-431.

Ordnance. Crew served weapons, TACTS pod if available, (60) flares.

External Syllabus Support. One adversary helicopter and appropriate air-to-air training area.

Crew. DACMI/PUI/CC/AO.

7. Fixed-Wing Defensive Air Combat Tactics (FWDACM)

a. Purpose. Demonstrate and introduce FWDACM in order to counter enemy offensive air capabilities.

b. General. At the completion of this stage, the PUI will be proficient in the conduct of the principles of FWDACM and have a thorough knowledge of weapons employment, aircraft control and threat tactics of FW adversaries.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours).

DACM-434 2.0 R 1 UH-1Y A

Goal. OS - Perform 1 v 1 FWDACM maneuvering.

Requirement

(1) Discuss FW capabilities/limitations, weapon envelopes and tactics of adversary FW aircraft, tactical advantages derived from Ps/Em charts which demonstrate the capabilities of the RW platform to be exploited when facing a FW adversary. Discuss procedures to counter the threat; FW air-to-air weapons considerations to include range estimation, lead requirements, TOF, RADAR/fire control capabilities of friendly and aggressor platforms, standard intercept controller terminology, weaponeering, ATF defense-in-depth plans, DACM training rules and FWDACM line number set-up and execution.

(2) Demonstrate and introduce 1 v 1 DACM against FW aircraft. Emphasize weapons employment, limitations and aircraft control. Complete a minimum of 1 line number sequence.

Performance Standards. Execute reactive maneuvers to FW threat attacks.

Ordnance. Crew served weapons, TACTS pod if available, (30) flares.

External Syllabus Support. 1 FW aggressor aircraft. Air-to-air range (TACTS range).

Crew. DACMI/PUI/CC/AO.

DACM-435 2.0 R E 2 H-1 A

Goal. OS - Perform 2 v 2 DACM against FW adversaries.

Requirement

(1) Discuss FW capabilities/limitations, weapons envelopes and tactics of adversary FW aircraft, Ps/EM of threat/friendly aircraft and the related tactical considerations, procedures

to counter the threat, DACM training rules and FW DACM line number set-up and execution.

(2) Demonstrate and introduce 2 v 2 DACM against FW aircraft. Emphasize weapons employment, limitations and aircraft/section control, section awareness and flight leadership as it applies to DACM. Complete a minimum of 1 line number sequence as lead and as wingman.

Performance Standards. Execute reactive maneuvers to FW threat attacks.

Prerequisite. DACM-434.

Ordnance. Crew served weapons, TACTS pod if available, (60) flares.

External Syllabus Support. Two FW adversary and appropriate air-to-air training area (TACTS range).

Crew. DACMI/PUI/CC/AO.

8. Nuclear, Biological, and Chemical Warfare (NBC)

a. Purpose. Introduce the pilot to operations while wearing the aviator's NBC protective mask (AR-5).

b. General. This event is designed to expand the capabilities of the aircrew in NBC operations.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review appropriate section of UH-1Y ANTTP/NATIP for information on the aviator's NBC protective mask prior to flight. The pilot will complete AR-5 familiarization lecture and aircraft egress with mask. Discuss capabilities and disadvantages of NBC protective mask, to include AR-5 emergency procedures. Review all MOPP conditions.

e. Flight and Simulator Event Training. (1 simulator event, 1.0 hour).

SNBC-440 1.0 R FTD/FSS S

Goal. OS - AR-5 protective mask introduction.

Requirement. Introduce wear of the AR-5 protective mask while conducting FAM maneuvers. Event will be flown during day and NVD conditions.

Performance Standards. IAW UH-1Y ANTTP/NATIP.

Crew. CSI/PUI.

9. Carrier Qualification (CQ)

a. Purpose. To introduce day, NVD, and night unaided flight operations from a carrier deck or air capable ship.

b. General. IAW applicable directives, IP will emphasize proper communication procedures, patterns, and aviation operations in the shipboard environment. Refer to appropriate NATOPS and appropriate shipboard NATOPS manuals for carrier operations. PUI shall complete the FCLP stage prior to commencing this stage.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 2.0 hours, 1 simulator event, 1.0 hour).

CQ-450 1.0 R 1 UH-1Y A

Goal. RS - Introduce day shipboard operations.

Requirement

(1) Discuss lost communication procedures and emergency procedures as related to shipboard environment.

(2) Introduce day shipboard operations.

(3) Review shipboard instrument procedures and Alpha, Charlie, and Delta patterns.

(4) Conduct a minimum of 5 day shipboard landings. Conduct 1 precision and 1 non-precision approach, if available. Conduct shipboard refueling, if available.

Performance Standards. IAW the UH-1Y NATOPS and shipboard NATOPS manuals.

Prerequisites. FCLP-241, IAW OPNAVINST 3710.7.

External Syllabus Support. Landing platform afloat.

Crew. BIP/PUI/CC.

CQ-451 1.0 R E 1 UH-1Y A NS

Goal. RS - Introduce NVD shipboard operations.

Requirement

(1) Discuss ship airspace and shipboard ordnance operations.

(2) Review shipboard instrument procedures and Alpha, Charlie, Delta patterns.

(3) Introduce NVD shipboard operations.

(4) Conduct a minimum of 5 NVD shipboard landings. Conduct 1 precision and 1 non-precision approach, if available. Conduct shipboard refueling, if available.

Performance Standards. IAW the UH-1Y NATOPS and shipboard NATOPS manuals.

Prerequisites. FCLP-242, CQ-450, IAW OPNAVINST 3710.7.

External Syllabus Support. Landing platform afloat.

Crew. NSI/PUI/CC/AO.

SCQ-452 1.0 R FFS S/A N*

Goal. RS - Conduct night unaided shipboard landings.

Requirement

(1) Discuss shipboard lighting and wind limitations.

(2) Introduce night unaided shipboard operations.

(3) Review shipboard instrument procedures and Alpha, Charlie and Delta patterns.

(4) Conduct a minimum of 5 night unaided shipboard landings. Conduct 1 precision and 1 non-precision approach.

Performance Standards. IAW UH-1Y NATOPS.

Prerequisites. CQ-450.

Crew. CSI(BIP)/PUI.

10. Tactical Air Coordinator Airborne [TAC(A)]

a. Purpose. Introduce and refine TAC(A) procedures.

b. General. At the completion of this stage, the PUI will demonstrate proficiency in the coordination of attack aircraft and multiple terminal controllers. At the completion of this stage, the PUI may be designated TAC(A) by the squadron commander (QUAL-617).

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (1 sortie, 2.0 hours).

TAC-470 2.0 E 1 UH-1Y A (NS)

Goal. OS - Conduct TAC(A) procedures with multiple terminal controllers.

Requirement. Perform coordination of attack aircraft and multiple terminal controllers. Receive attack briefings from the FAC/FAC(A) and assign appropriate CAS aircraft. Coordinate target mark and control with the FAC/FAC(A). Manage assigned airspace and provide command and control system with essential elements of information.

Performance Standards. Be able to accurately copy immediate JTAR, coordinate timely CAS in response to immediate request, and to pass CAS aircraft BDA via the C^3 system.

Prerequisite. QUAL-613, DESG-679.

External Syllabus Support. Two CAS elements and two terminal controllers.

Crew. TAC(A)I(NSI(TAC(A)I)/PUI/CC(AO).

140. INSTRUCTOR UNDER TRAINING (IUT) FLIGHT/SIMULATOR/EVENT PERFORMANCE REQUIREMENTS

1. Purpose. To develop standardized IPs with the ability to teach flight skills requisite to qualification as a Core Skill Plus Qualified pilot. UHC designation is required prior to starting this stage.

2. General. Upon completion of this phase of training the IUT may be designated a BIP, TERFI and WTO.

a. Completion of the BIP stage meets the requirements for the PUI to be designated a BIP. At the discretion of the squadron commanding officer a letter designating the IUT as a BIP shall be placed in the NATOPS jacket, APR and a tracking code of IDSG-680 shall be logged.

b. Completion of the TERFI stage meets the requirements for the PUI to be designated a TERFI. At the discretion of the squadron commanding officer a letter designating the IUT as a TERFI shall be placed in the NATOPS jacket, APR and a tracking code of IDSG-681 shall be logged.

c. Completion of the WTO stage meets the requirements for the IUT to be designated a WTO. At the discretion of the squadron commanding officer a letter designating the IUT as a WTO shall be placed in the NATOPS jacket, APR and a tracking code of IDSG-682 shall be logged. Crew served weapons listed for each event will be selected based on training requirements.

d. All stages will be flown in the order listed. Prior to the completion of each stage of training, the IUT will be required to present a class from an applicable MAWTS-1 ASP lecture. Emphasis will be placed on error analysis, error correction, instructional technique, briefing and debriefing procedures.

3. Basic Instructor Pilot (BIP)

a. Purpose. To qualify the IUT to instruct basic FAM, INST, FORM, CAL, FCLP, ASPT, and CQ.

b. General. To instruct CQ, IUT must meet currency requirements outlined in OPNAVINST 3710.7.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours, 3 simulator events, 4.5 hours).

SBIP-500 1.5 R FTD/FFS S

Goal. OS – Emergency procedures standardizations.

Requirement

(1) Introduce procedures for running simulator.

(2) Discuss cockpit indications of all emergencies.

(3) Review SCSIX-190 stressing systems failures and emergencies. The IUT will demonstrate a thorough knowledge of aircraft systems and emergency procedures. Emphasize CRM during emergency procedures execution.

Performance Standards. IAW UH-1Y NATOPS and MDG.

Prerequisites. RQRD-602, DESG-649.

Crew. CSI(BIP)/IUT.

SBIP-501 1.5 R FTD/FFS S/A (N*)

Goal. LS – Review all FAM stage maneuvers and CQ procedures with emphasis on standardization IAW the UH-1Y NATOPS, MDG and LHA/LHD NATOPS.

Requirement

(1) Discuss instructional techniques.

(2) Demonstrate knowledge of preflight, local course rules and techniques of instruction for all familiarization maneuvers and shipboard operations. Emphasize shipboard approaches, patterns, landings, standardized maneuver descriptions, system failures and emergencies. IUT will perform all FAM stage maneuvers. IUT will perform a minimum of 5 FCLPs.

Performance Standards. IAW UH-1Y NATOPS and MDG.

Prerequisites. SBIP-500.

Crew. BIP/IUT.

SBIP-502 1.5 R FTD S/A (N*)

Goal. LS - IUT will demonstrate the ability to instruct in the instrument flight regime.

Requirement

(1) Discuss applicable instrument publications and squadron flight operations SOP.

(2) IP will act as PUI. IP will provide the IUT with an actual or notional instrument flight plan developed with intentional errors. A portion of the sortie will be conducted under positive radar control. IUT will satisfactorily demonstrate the ability to execute, analyze and correct all standard instrument maneuvers under actual or simulated IFR conditions.

(3) Review IFR flight planning and enroute procedures. Conduct a minimum of 1 instrument approach.

Performance Standards. IUT will correctly identify all errors in a flight plan provided by the IP. IUT will ensure that the PUI maintains established BAW parameters.

Prerequisites. SBIP-500.

Crew. CSI(BIP)/IUT.

BIP-503 2.0 2 H-1 A

Goal. LS – IUT will demonstrate the ability to instruct formation flight.

Requirement

(1) Discuss instructor briefing and debriefing techniques.

(2) The IUT will brief and lead the flight. The IP will act as the PUI for a portion of the parade and tactical sequences. The IUT will demonstrate all formation stage maneuvers with

emphasis on instructional technique, accurate maneuver description, formation signals and parade/tactical formation maneuvering.

Performance Standards. IUT will properly perform all briefed maneuvers from both lead and wingman position IAW the UH-1Y NATOPS, ANTTP/NATIP and MDG. IUT will be able to identify and correct abnormal parameters performed by the IP/PUI.

Prerequisites. SBIP-500.

Crew. BIP/IUT.

BIP-504 2.0 R E 2 UH-1Y A

Goal. LS - IUT will demonstrate the ability to instruct section CAL/ASPT and accurately identify and correct PUI BAW errors, tendencies and procedural errors during FAM maneuvers.

Requirement

(1) Discuss instructor briefing and debriefing techniques.

(2) Brief and discuss water insertion, paradrop, fastrope, rappelling, hoist operations, and the similarities between SPIE and externals.

(3) The IUT shall demonstrate HIE approaches, and section CAL profiles.

(4) The IUT will brief and lead the flight.

Performance Standards. IUT will properly perform all briefed maneuvers IAW the UH-1Y ANTTP/NATIP. IUT will be able to identify and correct abnormal parameters performed by the IP/PUI.

Prerequisites. BIP 500-503.

Crew. BIP/IUT/CC/AO.

4. Terrain Flight Instructor (TERFI)

a. Purpose. To qualify the IUT as a TERF instructor.

b. General. IUT will be designated BIP prior to beginning TERFI training. IUT will demonstrate the ability to utilize MPS and appropriate tactical navigation systems. Upon completion of the TERF IUT stage, the IUT may be designated a TERFI by the squadron commander.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (1 sortie, 2.0 hours, 1 simulator event, 1.5 hours).

STERF-510 1.5 FFS S/A

Goal. OS – Review all TERF maneuvers and profiles.

Requirement

(1) Discuss crew coordination, comfort level, map preparation and low altitude emergencies emphasizing single engine operation.

(2) Review all TERF maneuvers.

(3) Review all TERF maneuvers, tactical decisions to fly TERF and threat considerations that influence TERF profiles.

Performance Standards. IAW the UH-1Y NATOPS, MDG, and ANTTP/NATIP.

Prerequisites. IDSG-680.

Crew. CSI(TERFI)/IUT.

TERF-511 2.0 R E 2 H-1 A

Goal. OS – Review TERF navigation, profiles and procedures.

Requirement. IUT will plan, brief and lead the flight. IUT will fly from the seat opposite of that flown during STERF-510.

(1) Discuss TERF navigation techniques and procedures, CRM, comfort level and the illusions of terrain flight.

(2) Demonstrate the use of the GPS and moving map system. The IUT will brief a TERF route with a minimum of 5 checkpoints. Emphasis will be on tactical use of terrain to navigate to a specific objective area, masking and unmasking profiles.

(3) Review boundary features including lateral limits and intermediate checkpoints.

Performance Standards. The IUT will navigate in low level, contour and NOE profile, remaining oriented within 200 meters, arriving at the final checkpoint within plus or minus 30 seconds of the planned time.

Prerequisites. STERF-510.

External Syllabus Support. Authorized TERF route.

Crew. TERFI/IUT/CC/AO.

5. Weapons Training Officer (WTO)

a. Purpose. To qualify the IUT as a WTO.

b. General. IUT will be designated a TERFI prior to beginning WTO training. The WTO is qualified to instruct all phases of flight except those requiring FAC(A)I, TAC(A)I, NSSI, NSFI, NSI, DACMI, or WTI qualifications. As such, the WTO shall demonstrate a sound knowledge of all aircraft weapon systems, threat systems and current tactics, as well as all TTPs within the Core Skill Plus phase.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours, 1 simulator event, 1.5 hours).

SWTO-520 1.5 R FFS S

Goal. LS - Review all UH-1Y systems (weapons, ASE, navigation, sensors).

Requirement

(1) Discuss/review UH-1Y NTIS components, operation, and malfunctions. Emphasis will be placed on the setup, optimization and employment of the sensor system in all acquisition modes. Discuss mission computer functionality and weapons selection pages.

(2) Discuss/review ASE components, operation, and malfunctions.

(3) Discuss/review UH-1Y navigation system, with emphasis placed on setup and operation for target engagement.

(4) Review all weapons systems components, operation and employment.

Performance Standards. IAW UH-1Y NATOPS and ANTTP/NATIP.

Prerequisite. IDSG-681.

Ordnance. If flown in aircraft, (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (30) flares.

Crew. WTO/IUT.

WTO-521 2.0 2 H-1 A

Goal. LS – Systems integration.

Requirement

(1) Brief and discuss CRM, cockpit setup, and systems integration with the employment of rockets and crew served weapons.

(2) Evaluate IUT’s ability to instruct cockpit setup and systems integration.

Performance Standards. Conduct flight IAW the UH-1Y ANTTP/NATIP, UH-1Y NATOPS, and RW TACSOP.

Prerequisite. SWTO-520.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (30) flares.

External Syllabus Support. Live fire/LASER range.

Crew. WTO/IUT/CC/AG.

WTO-522 2.0 R E 2 H-1 A

Goal. LS - Tactical mission instruction.

Requirement

(1) Plan, brief, and execute a tactical mission in a permissive to non-permissive environment using MCCRES/MEU (SOC) standards. Emphasize threat analysis and actions in the objective area. Utilize ordnance if available.

(2) Evaluate IUT's ability to recognize, analyze, and correct nonstandard performance in the execution of 300-level tactical missions.

Performance Standards. Conduct flight IAW the UH-1Y ANTTP/NATIP, UH-1Y NATOPS, and RW TACSOP.

Prerequisite. WTO-521.

Ordnance. (7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (30) flares.

External Syllabus Support. Live fire/LASER range.

Crew. WTI/IUT/CC/AG.

6. Forward Air Controller (Airborne) Instructor (FAC(A)I)

a. Purpose. To certify the IUT as a FAC(A)I capable of conducting ground and airborne instruction of FAC(A) missions. Emphasis will be placed on the ability to coordinate simultaneous FW and RW CAS, surface fires (direct and indirect), while working with a TACP and operating within the MACCS.

b. General. IUT will be FAC(A) qualified IAW NAVMC P3500.48 and current/proficient per the JFAC(A) MOA. IUT will be designated a WTO and NSI prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours).

FACAI-540 2.0 2 H-1 A (NS)

Requirement. Reference the MAWTS-1 Course Catalog for the FAC(A)I POI.

Ordnance. (7) 2.75-inch WP rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (40) chaff, (20) flares.

FACAI-541 2.0 R E 2 H-1 A (NS)

Requirement. Reference the MAWTS-1 Course Catalog for the FAC(A)I POI.

Ordnance. (7) 2.75-inch WP rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (40) chaff, (20) flares.

7. Night Systems SAR Instructor (NSSI)

a. Purpose. To certify the IUT as an NSSI capable of safely conducting ground and airborne instruction of SAR missions.

b. General. IUT will be designated SAR Helicopter Aircraft Commander and NSQ LLL and proficient IAW MCO 3500.14 and 3500.49 prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (3 sorties, 4.0 hours).

NSSI-550	1.0	1 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSSI POI.

NSSI-551	1.0	1 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSSI POI.

NSSI-552	2.0	R E 1 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSSI POI.

8. Night Systems Familiarization Instructor (NSFI)

a. Purpose. To certify the IUT as an NSFI capable of safely conducting ground and airborne instruction of night vision device (NVD) flight during the core skill introduction flight phase.

b. General. IUT will be Night Systems Qualified (NSQ) IAW NAVMC P3500.14 and P3500.49 and designated a TERF(I) prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (3 Sorties, 6.0 hours).

NSFI-560	2.0	1 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSFI POI.

NSFI-561	2.0	2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSFI POI.

NSFI-562	2.0	R E 1 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSFI POI.

9. Tactical Air Coordinator (Airborne) (TAC(A)I)

a. Purpose. To certify the IUT as an TAC(A)I capable of safely conducting ground and airborne instruction of TAC(A) missions.

b. General. IUT will be designated FAC(A) Instructor and TAC(A) qualified IAW NAVMC 3500.49 prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (1 sortie, 2.0 hours).

TACAI-570 2.0 R E 1 UH-1Y A (NS)

Requirement. Reference the MAWTS-1 Course Catalog for the TAC(A)I POI.

10. Defensive Air Combat Maneuvering Instructor (DACMI)

a. Purpose. To certify the IUT as an DACMI capable of safely conducting ground and airborne instruction of the UH-1Y air-to-air flight syllabus.

b. General. IUT will be DACM qualified IAW MCO P3500.14, P3500.49 and designated WTO prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 sorties, 8.0 hours).

DACMI-580 2.0 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the DACMI POI.

Ordnance. (60) Flares.

DACMI-581 2.0 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the DACMI POI.

Ordnance. (60) Flares.

DACMI-582 2.0 R E 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the DACMI POI.

Ordnance. (60) Flares.

DACMI-583 2.0 R E 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the DACMI POI.

Ordnance. (60) Flares.

11. Night Systems Instructor (NSI)

a. Purpose. To certify the IUT as an NSI capable of safely conducting ground and airborne instruction of the UH-1Y night vision device (NVD) flight syllabus.

b. General. IUT will be NSQ LLL and proficient IAW MCO P3500.14, P3500.48 and designated WTO prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (5 sorties, 8.0 hours).

NSI-590 1.0 1 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

NSI-591 1.0 1 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

NSI-592 2.0 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

Ordnance. (7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (40) chaff, (20) flares.

NSI-593 2.0 R 2 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

NSI-594 2.0 R E 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

Ordnance. (7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (40) chaff, (20) flares.

150. REQUIREMENTS, QUALIFICATIONS , DESIGNATIONS, INSTRUCTOR DESIGNATIONS (RQRD, QUAL, DESG, IDSG)

1. Purpose. To provide a vehicle for tracking codes associated with qualifications and designations.

2. General

a. "E"-coded flights are evaluation flights. Certain evaluation sorties require completion of a stage (for example, QUAL-613 (FAC(A)) requires completion of all five FAC(A) stage flights. Other "E"-coded sorties in the 600-level phase may be logged in conjunction with any Core Skill Basic, Advanced or Plus sortie that meets the requirements laid out in the flight description (for example, DESG-649 (section leader evaluation). CRP is not awarded for 600-level sorties, however, CRP credit may be obtained by logging the appropriate training code(s) in the 200-400 level syllabus. Once the flight to attain the qualification/designation is complete, a letter from the squadron commanding officer awarding the qualification/designation shall be placed in the NATOPS and APR before that qualification/designation can be utilized. Crew served weapons listed for each event will be selected based on training requirements.

b. After the commanding officer has designated the PUI in writing as a section lead or a division lead, the operations department shall log DESG-649 (section lead) and DESG-659 (division lead) respectively.

3. Ground Training. Per applicable directives.

RQRD-600 1.5 E 1 UH-1Y A/S (N*)

Goal. OS - Conduct an annual instrument check.

Requirement. Successfully conduct the check IAW applicable directives.

Performance Standards. IAW the NATOPS, MDG and Instrument Flight Manual (IFM).

Prerequisite. IAW OPNAVINST 3710.

Crew. BIP-IFBM/PUI (QO).

RQRD-601 1.5 E 1 UH-1Y (N)

Goal. OS - Conduct annual NATOPS check.

Requirement. Successfully conduct the evaluation IAW applicable directives. Recommend that a portion of the NATOPS check be flown at night.

Performance Standards. Conduct flight IAW the UH-1Y NATOPS Manual.

Prerequisite. IAW NATOPS, RQRD-602.

Crew. NI/ANI(NSI if PUI is not NSQ)/PUI.

SRQRD-602 1.5 E FTD/FFS S

Goal. OS - Review aircraft emergency procedures and systems failures.

Requirement. Review emergency procedures knowledge, recognizing emergencies, applying appropriate procedures, and full/power recovery autorotations.

Performance Standards. Exhibit the ability to operate the aircraft under all emergency conditions.

Crew. CSI(BIP)/PUI.

QUAL-610 E 1 UH-1Y A NS

Goal. Tracking Code for TERF qualification.

Requirement. Completion of TERF-201 meets the requirements for the PUI to be TERF qualified. At the discretion of the squadron commanding officer, a letter assigning the PUI as TERF qualified shall be placed in the NATOPS jacket, APR and a Tracking Code of QUAL-610 shall be logged.

Prerequisite. TERF-200, 201 complete.

QUAL-611 E 1 UH-1Y A NS

Goal. Tracking Code for NSQ (HLL).

Requirement. Completion of all 200-level night systems events meets the requirements for the PUI to be NSQ (HLL). At the discretion of the squadron commanding officer, a letter

assigning the PUI as NSQ (HLL) qualified shall be placed in the NATOPS jacket, APR and a Tracking Code of QUAL-611 shall be logged.

Prerequisite. TERF-201, REC-221, CAL-232, FCLP-242, SWD-253, SWD-254, ESC-262, and OAS-273.

QUAL-612 E 1 UH-1Y A NS

Goal. Tracking Code for NSQ (LLL).

Requirement. Completion of all ANSQ events meets the requirements for the PUI to be NSQ (LLL). At the discretion of the squadron commanding officer a letter assigning the PUI as ANSQ (LLL) qualified shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-612 shall be logged.

Prerequisite. SANSQ-300, ANSQ-301, ANSQ-302, ANSQ-303, SANSQ-305, and ANSQ-306.

QUAL-613 E 1 UH-1Y A (NS)

Goal. Tracking Code for FAC(A).

Requirement. Completion of the FAC(A) stage meets the requirements for the PUI to be FAC(A) qualified. At the discretion of the squadron commanding officer, a letter assigning the PUI as FAC(A) qualified shall be placed in the NATOPS jacket, APR and a Tracking Code of QUAL-613 shall be logged.

Prerequisites. SFACA-330, FACA-331-334, DESG-649.

QUAL-614 E 2 H-1 A

Goal. Tracking Code for RWDACM.

Requirement. Completion of the DACM 431-432 meets the requirements for the PUI to be RWDACM qualified. Until a CC/AO door gunner simulator linked to the UH-1Y simulator is available for training, DACM-430 is not required for RWDACM stage completion. At the discretion of the squadron commanding officer, a letter assigning the PUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a Tracking Code of QUAL-614 shall be logged.

Prerequisites. DACM-431-432.

QUAL-615 E 2 H-1 A

Goal. Tracking Code for FWDACM.

Requirement. Completion of the FWDACM stage meets the requirements for the PUI to be DACM qualified. At the discretion of the squadron commanding officer, a letter assigning the PUI as DACM qualified shall be placed in the NATOPS jacket, APR and a Tracking Code of QUAL-615 shall be logged.

Prerequisites. DACM-434, 435.

QUAL-616 E 1 UH-1Y A D/N*/NS

Goal. Tracking Code for Carrier Qualification (CQ).

Requirement. Completion of the CQ stage meets the requirements for the PUI to be CQ qualified. At the discretion of the squadron commanding officer, a letter assigning the PUI as CQ qualified shall be placed in the NATOPS jacket, APR and a Tracking Code of QUAL-616 shall be logged.

Prerequisites. CQ-450, CQ-451.

QUAL-617 E 1 UH-1Y A (NS)

Goal. Tracking code for Tactical Air Coordinator (Airborne) [TAC(A)].

Requirement. PUI will plan, brief, and execute a TAC(A) mission. Flight will include appropriate coordination with MAGTF assets, TACC, DASC, FSCC, terminal controllers, and CAS aircraft. Code may be logged in conjunction with a TAC-470 flight.

Prerequisite. QUAL-613, DESG-679.

DESG-630 E 1 UH-1Y A (N)

Goal. Tracking Code for PQM.

Requirement. Completion of the Core Skill Introduction stage (CSIX-191 or RQRD-601) meets the requirements for the PUI to be PQM. At the discretion of the squadron commanding officer a letter assigning the PUI as PQM shall be placed in the NATOPS jacket and APR, and a tracking code of DESG-630 shall be logged.

Prerequisite. CSIX-191.

DESG-631 2.0 R E 1 UH-1Y A (NS)

Goal. Tracking Code for Utility Helicopter Commander (UHC) Designation.

Requirement. PUI will fly as wingman with a designated section leader on a tactical mission that meets the sortie description for any previously flown OAS or ESC events with ordnance. The UHC Evaluation is a stand alone sortie to be completed once proficient in all Core Skills except FACA. Upon completion of the event, and at the discretion of the squadron commanding officer, a letter designating the PUI as an UHC shall be placed in the NATOPS jacket, APR and a Tracking Code of DESG-631 shall be logged.

Prerequisite. Successful completion of the Core Skill Basic phase and the ANSQ, ASPT, and OAS stages of the Core Skill Advanced phase through OAS-323.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (20) chaff, (10) flares.

External Syllabus Support. Live fire range and LASER safe range if available.

DESG-632 1.5 E 1 UH-1Y A

Goal. RS - Tracking Code for Functional Check Pilot designation.

Requirement. Successfully complete the local requirements for designation by the commanding officer. At the discretion of the squadron commanding officer, a letter designating the pilot as an FCP shall be placed in the NATOPS jacket, APR and a Tracking Code of DESG-632 shall be logged.

Prerequisite. DESG-630.

4. Section Leader

a. Purpose. To prepare and evaluate PUI's ability to plan, brief, and lead a section of H-1s.

b. General

(1) PUI shall conduct day and night workup sorties in order to develop section leadership. Mixed sections are authorized. Completion of the Section Leader Under Training (SLUT) syllabus meets the requirements for the PUI to be designated a section leader. At the discretion of the squadron commanding officer, a letter designating the pilot as section leader shall be placed in the NATOPS jacket and APR, and a tracking code of DESG-649 shall be logged. The section leader evaluation will use ordnance. Re-designation will require successful completion of the evaluation event (649) only. For the evaluation flight the PUI will fly any of the previously flown Core Skill Basic or Core Skill Advanced sorties in conjunction with the 649 tracking code.

(2) After the commanding officer has designated the PUI in writing as a section lead, and to facilitate automated tracking, the operations department is required to log DESG-649 (section lead) for the newly designated PUI.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (3 sorties, 6.0 hours).

DESG-640 2.0 2 H-1 A

Goal. OS - Tracking code for day section leader training.

Requirement. Plan, brief, lead and debrief a section. The PUI will fly any of the previously flown Core Skill Basic or Advanced sorties in conjunction with the 640 Tracking Code.

Performance Standards. Safe completion of the applicable mission as a section leader.

Prerequisite. DESG-631.

Ordnance. Optional. (7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (20) Chaff, (10) flares.

Crew. WTO/PUI.

DESG-641 2.0 2 H-1 A NS

Goal. OS - Tracking Code for night section leader training.

Requirement. Plan, brief, lead and debrief a section. The PUI will fly any of the previously Core Skill Basic or Advanced sorties in conjunction with the 641 Tracking Code.

Performance Standards. Safe completion of the applicable mission as a section leader.

Prerequisites. DESG-640.

Ordnance. Optional. 7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (20) Chaff, (10) flares.

Crew. NSI/PUI.

DESG-649 2.0 R E 2 H-1 A (NS)

Goal. OS - Tracking Code for section leader evaluation.

Requirement. Plan, brief, lead and debrief a section on a day or night tactical mission utilizing ordnance. The PUI will fly any of the previously flown Core Skill Basic or Advanced or Plus sorties in conjunction with the 649 Tracking Code. The PUI will conduct a minimum of 2 section attacks in the objective area.

Performance Standards. Safe completion of the applicable mission as a section leader.

Prerequisites. DESG-641.

Ordnance. (7) 2.75 inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (40) chaff, (20) flares.

External Syllabus Support. Live fire and LASER range.

Crew. WTO & DIV LDR (NSI)/PUI.

5. Division Leader

a. Purpose. To prepare and evaluate PUI's ability to plan, brief, and lead a division of H-1s.

b. General

(1) PUI shall conduct day and night workup sorties in order to develop division leadership. Mixed divisions are authorized. Completion of the DLUT syllabus meets the requirements for the PUI to be designated a division leader. At the discretion of the squadron commanding officer, a letter designating the pilot as division leader shall be placed in the NATOPS jacket, APR and a tracking code of DESG-659 shall be logged. The division leader evaluation sortie will use ordnance. Minimum qualifications will be IAW NATOPS. Re-designation will require successful completion of the evaluation event (659) only. For the evaluation flight the PUI will fly any of the previously flown Core Skill Basic, Advanced or Plus sorties in conjunction with the 659 tracking code.

(2) After the commanding officer has designated a pilot in writing as a division lead, and to facilitate automated tracking, the operations department is required to log DESG-659 (division lead).

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (3 sorties, 6.0 hours).

DESG-650 2.0 3+ H-1 A

Goal. OS - Tracking code for day division leader training.

Requirement. Plan, brief, lead and debrief a division. The PUI will fly any of the previously flown Core Basic, Advanced or Plus sorties in conjunction with the 650 tracking code.

Performance Standards. Safe completion of the applicable mission as a division leader.

Prerequisites. DESG-649.

Ordnance. Optional. 7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (20) Chaff, (10) flares.

Crew. WTO & DIV LDR/PUI.

DESG-651 2.0 3+ H-1 A NS

Goal. OS - Tracking Code for night division leader training.

Requirement. Plan, brief, lead and debrief a division. The PUI will fly any of the previously flown Core Basic, Advanced or Plus sorties in conjunction with the 651 Tracking Code.

Performance Standards. Safe completion of the applicable mission as a division leader.

Prerequisites. DESG-650.

Ordnance. Optional. 7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (20) Chaff, (10) flares.

Crew. NSI & DIV LDR/PUI.

DESG-659 2.0 R E 3+ H-1 A (NS)

Goal. OS - Tracking Code for division leader evaluation.

Requirement. Plan, brief, lead and debrief a division on a day or night tactical mission utilizing ordnance. The PUI will fly any of the previously flown Core Basic, Advanced or Plus sorties in conjunction with the 659 Tracking Code. Conduct a minimum of 2 division attacks in the objective area.

Performance Standards. Safe completion of the applicable mission as a division leader.

Prerequisites. DESG-651.

Ordnance. (7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (40) chaff, (20) flares.

External Syllabus Support. Live fire and LASER safe range.

Crew. WTO & DIV LDR (NSI)/PUI.

6. Flight Leader

a. Purpose. To prepare and evaluate PUI's ability to plan, brief, and lead a flight of at least 5 helicopters.

b. General. Flight leader is designated in recognition of experience, demonstrated flight leadership ability, and judgment. Work-up for this phase shall consist of completion of the division leader syllabus. Completion of DESG-669 meets the requirements for the PUI to be designated a flight leader. At the discretion of the squadron commanding officer, a letter designating the pilot as flight leader shall be placed in the NATOPS jacket, APR and a tracking code of DESG-669 shall be logged.

c. Crew Requirements. Work-up sorties shall be flown IAW the division leader syllabus. The DESG-669 evaluation sortie must be flown with a designated flight leader.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (1 sortie, 2.0 hours).

DESG-669 2.0 R E 5+ H-1 A (NS)

Goal. OS- Conduct a flight leader check.

Requirement. Plan, brief, lead and debrief a sortie on a day or night tactical mission. The PUI will fly any of the previously flown Core Skill Basic, Advanced or Plus sorties in conjunction with the 669 Tracking Code.

Performance Standards. Safe completion of the applicable mission as a flight leader.

Prerequisites. DESG-659.

Ordnance. Optional. (7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (40) chaff, (20) flares.

Crew. WTO & FLT LDR (NSI)/PUI.

7. Air Mission Commander (AMC)

a. Purpose. To prepare and evaluate PUI's ability to plan, brief, and lead an assault support or OAS mission IAW MCCRES/MEU (SOC) standards.

b. General. AMC is designated in recognition of experience, demonstrated flight leadership ability, and judgment. Work-up for this phase shall consist of completion of the division leader syllabus. Completion of DESG-679 meets the requirements for the PUI to be designated an AMC. At the discretion of the squadron commanding officer, a letter designating the PUI as an AMC shall be placed in the NATOPS jacket and APR, and a tracking code of DESG-679 shall be logged.

c. Crew Requirements. The DESG-679 evaluation must be evaluated by an AMC. There is no requirement for the PUI to conduct aircrew duties during the evaluation.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (1 sortie, 0.0 hours).

DESG-679 R E (NS)

Goal. Conduct an AMC check.

Requirement. Plan, brief, and debrief a sortie as AMC.

Performance Standards. Safe completion of the applicable mission as AMC.

Prerequisite. DESG-659.

Ordnance. Optional. (7) 2.75-inch rockets, (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240, (40) chaff, (20) flares.

External Syllabus Support. Assault support aircraft, GCE and MACCS agencies as required.

IDSG-680 E 1 UH-1Y A

Goal. Tracking code for Basic Instructor Pilot (BIP) designation.

Requirement. Completion of the BIP stage meets the requirements for the IUT to be designated a BIP. At the discretion of the squadron commanding officer, a letter designating the pilot as a BIP shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-680 shall be logged.

IDSG-681 E 1 UH-1Y A

Goal. Tracking code for Terrain Flight Instructor (TERFI) designation.

Requirement. Completion of the TERFI stage meets the requirements for the IUT to be designated a TERFI. At the discretion of the squadron commanding officer, a letter designating the pilot as a TERFI shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-681 shall be logged.

IDSG-682 E 2 H-1 A

Goal. Tracking code for Weapons Training Officer (WTO) designation.

Requirement. Completion of the WTO stage meets the requirements for the IUT to be designated a WTO. At the discretion of the squadron commanding officer a letter designating the pilot as a WTO shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-682 shall be logged.

IDSG-683 E 2 H-1 A (NS)

Goal. Tracking code for FAC(A)I designation.

Requirement. Successfully complete the requirements of FAC(A)I. After successfully completing the appropriate MAWTS-1 Course Catalog syllabus and at the discretion of the squadron commanding officer, a letter designating the pilot as a FAC(A)I shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-683 shall be logged.

IDSG-688 E 2 H-1 A

Goal. Tracking Code for DACMI designation.

Requirement. Successfully complete the requirements of DACMI. After successfully completing the appropriate MAWTS-1 Course Catalog syllabus and at the discretion of the squadron commanding officer, a letter designating the pilot as a DACMI shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-688 shall be logged.

IDSG-689 E 1 UH-1Y A (NS)

Goal. Tracking Code for TAC(A)I designation.

Requirement. Successfully complete the requirements of TAC(A)I. This code shall be logged in conjunction with the appropriate MAWTS-1 Course Catalog syllabus event.

IDSG-693 E 1 UH-1Y A NS

Goal. Tracking Code for NSSI designation.

Requirement. Successfully complete the requirements of NSSI. This code shall be logged in conjunction with the appropriate MAWTS-1 Course Catalog syllabus event.

IDSG-694 E 1 UH-1Y A NS

Goal. Tracking Code for NSFI designation.

Requirement. Successfully complete the requirements of NSFI. After successfully completing the appropriate MAWTS-1 Course Catalog syllabus and at the discretion of the squadron commanding officer, a letter designating the pilot as an NSFI shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-694 shall be logged.

IDSG-696 E 2 H-1 A NS

Goal. Tracking Code for NSI designation.

Requirement. Successfully complete the requirements of NSI. After successfully completing the appropriate MAWTS-1 Course Catalog syllabus and at the discretion of the squadron commanding officer, a letter designating the pilot as an NSI shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-696 shall be logged.

IDSG-699 E 1 UH-1Y A (NS)

Goal. Tracking code for WTI designation.

Requirement. Successfully complete the requirements of WTI. This code shall be logged upon successful completion of the Weapons and Tactics Instructor Course.

151. SPECIFIC OPERATIONS TRACKING CODES

1. Purpose. To provide a vehicle for Tracking Codes associated with specific missile/Precision Guided Munitions (PGM).

SOTC-713 1 UH-1Y A (NS)

Goal. OS - Tracking Code for a live guided rocket shoot (APKWS or LOGIR).

Requirement. This event code is for tracking purposes only. This sortie should be conducted in conjunction with another syllabus event. Only pilot firing guided rocket receives event code.

Ordnance. 1 live guided rocket.

Crew. WTO (NSI)/PUI.

160. ORDNANCE REQUIREMENTS. Annual ordnance requirements are derived by individual training requirements. Crew concept is taken into account between Pilot and CC/AO requirements. There are direct comparisons, by phase, between the number of Pilot sorties requiring ordnance and the number of CC/AO sorties requiring ordnance. For example, there are (10) 200 level pilot sorties requiring ordnance and there are also (10) 200 level CC/AO sorties requiring ordnance. The sorties are not an exact match, but can be executed in a manner so that extra sorties are not required for CC/AO training or pilot training. The only remaining factor for computing ordnance requirement is the difference in personnel, 23 pilots vs. 36 CC/AO. This is accounted for in the ordnance tables. Ordnance totals reflect requirements for the UH aircrew community as a whole and are repeated in the CC/AO T&R. Gun ammunition is almost exclusively for CC/AO training.

1. Additional ordnance requirements such as illumination, expendables, and WP (FAC(A) target marking) are specified for certain events. For the basic POI through 600 level, ordnance requirements are 50% HE, 30% Inert, 15% WP, and 5% Illum.

2. Expendable Ordnance

a. BASIC/REFRESHER/SERIES CONVERSION/INSTRUCTOR/ANNUAL

ORDNANCE*	100	200	300	400	500 IUT	600 FL	R*	SC*	ANNUAL**
2.75” Rockets	14 (21)	56 (83)	63 (77)	28 (35)	42 (49)	63	98	35 (49)	63
7.62mm GAU-17	3000 (4500)	15000 (19500)	9000 (13500)	7500 (9000)	9000 (10500)	13500	15000	9000 (12000)	10500
.50CAL GAU-16	1000 (1500)	3000 (3900)	1800 (2700)	1800 (2100)	1800 (2100)	2700	3000	1800 (2600)	2100
7.62mm M-240	0	4000 (5200)	2400 (3600)	2400 (2800)	2400 (2800)	3600	4000	2400 (2800)	2800
Chaff	0	160 (250)	240 (340)	160 (200)	160	260	240 (270)	120 (170)	210 (240)
Decoy flares	0	340 (450)	180 (260)	320 (340)	380 (410)	130	340 (370)	160 (230)	230 (260)

NOTES: Numbers in parentheses include S and S/A hops flown in aircraft to reflect times where no simulator is available.

* R and SC POI reflect ordnance requirement through 300 level.

** Annual ordnance requirements reflect sorties from the Maintain Table through 300 level. (40% HE, 30% Inert, 20% WP, 10% Illum.)

3. Ground Ordnance

a. BASIC/REFRESHER/SERIES CONVERSION/INSTRUCTOR/ANNUAL

ORDNANCE	100	200	300	400	500 IUT	600 FL	R*	SC*	ANNUAL**
HE Artillery	0	0	8 (13)	0	16	0	8 (13)	0	8
WP Artillery	0	0	4	0	8	0	4	0	4
CAS Bombs	0	0	16	4	8	0	16	0	8

NOTES: Numbers in parentheses include S and S/A hops flown in aircraft to reflect times where no simulator is available.

* R and SC POI reflect ground ordnance requirement through 300 level.

** Annual ground ordnance requirements reflect sorties from the Maintain Table through 300 level.

	INITIAL CREW(1)	REFRESHER CREW(2)	PROFICIENT CREW(3)
2.75" RKTS - HE/INERT	98	63	42
2.75" RKTS - WP/RP	28	28	14
2.75" RKTS - ILLUM	7	7	7
2.75" RKTS - APKWS/LOGIR	TBD	TBD	TBD
7.62MM - GAU-17	27000	15000	10500
.50 CAL - GAU-16	5800	3000	2100
7.62MM - M-240	6400	4000	2800
Chaff	400	240	210
Flares	520	340	230
PILOT (23)	7	8	8
CC/AO (36)	12	12	12

General: In these calculations ordnance is always included on ordnance optional sorties, but S and S/A sorties are not included. Requirements are per individual. Assumption is that Initial/Refresher syllabus may be completed in 1 year.

1. Initial Basic crews shall fly all 200 and 300 level events.
2. Refresher crews shall fly all R coded 200 and 300 level events.
3. Proficient crews are defined by the Core Skill Proficiency table on page 6 and their minimum annual ordnance requirements are driven by sorties in the Maintain Table.
4. Based on a full HMLA T/O of 23 UH pilots and 36 CC/AO, with the assumption that roughly 1/3 fall into each POI.
5. "Type" column indicates which aircrew factor is used to determine ordnance totals.

UH-1Y ANNUAL SQUADRON REQUIREMENTS					
	Type	INITIAL PILOT x 7 CC/AO x 12	REFRESHER PILOT x 8 CC/AO x 12	PROFICIENT PILOT x 8 CC/AO x 12	ANNUAL SQUADRON TOTAL
2.75" RKTS - HE/INERT	P	686	504	336	1526
2.75" RKTS - WP/RP	P	196	224	112	532
2.75" RKTS - ILLUM	P	49	56	56	161
7.62MM - GAU-17	CC/AO	324000	180000	126000	630000
.50 CAL - GAU-16	CC/AO	69600	36000	25200	130800
7.62MM - M-240	CC/AO	76800	48000	33600	158400
CHAFF	P	2800	1920	1680	6400
FLARES	P	3640	2720	1840	8200

161. RANGE REQUIREMENTS

1. General. The range requirements listed below are based on event requirements listed in the individual event descriptions. Units should make every effort to adhere to the requirements listed in the event descriptions, but Commanding Officers may waive requirements based on existing range capabilities and limitations.

a. Threat Counter-Tactics (TCT). Threat emitter and expendable usage.

b. Specific Weapons Delivery (SWD), Advanced Night Systems Qual (ANSQ)

(1) All rotary-wing air to ground ordnance permitted.

(2) Expendable usage.

(3) Lasers permitted.

c. Offensive Air Support (OAS)

(1) All rotary-wing air to ground ordnance permitted.

(2) Expendable usage.

(3) Lasers permitted.

(4) Supports all three types of Close Air Support (CAS) control. Allows JTAC personnel in range.

d. Forward Air Controller (Airborne) (FAC(A))

(1) All rotary-wing air to ground ordnance permitted.

(2) All fixed-wing air to ground ordnance permitted.

(3) Expendable usage.

(4) Lasers permitted.

(5) Supports all three types of Close Air Support (CAS) control. Allows JTAC personnel in range.

(6) Ground indirect fire systems permitted (artillery/mortars).

e. Defensive Air Combat Maneuvering (DACM).

(1) Air Combat Maneuvering (ACM) permitted both fixed-wing and rotary-wing.

(2) Expendable usage.

(3) Tactical Air Combat Training System (TACTS) or comparable system compatible.

(4) Air to Air Missile firing capable, if applicable.

170. EVENT MATRIX

UH-1Y															
100 SERIES CORE SKILL INTRODUCTION															
STAGE	**TRNG CODE**	**SEAT**	**EVENT DESCRIPTION**	**FLIGHT HOURS**	**SIMULATOR HOURS**	**REFLY INTERVAL**	**DEVICE**	**# OF A/C OR SIM**	**CONDITIONS**	**PREREQ**	**POI**	**EVALUATION**	**CRP**	**CHAINING**	**EVENT CONVERSION**
FAM															
FAM	00		PREFLIGHT FAM	0.0		*	A	1	D	SYS ICW COMPLETE	R,M,SC		0.00		
FAM	000		REVIEW PREFLIGHT	0.0		*	A	1	D	00			0.00		
SFAM	100	LS	FTD/FSS/CHKLST INTRO		1.5	*	S	1	D	FAM ICW COMPLETE	SC		0.80		
SFAM	101	RS	INTRO NATOPS CHKLST		1.5	*	S	1	D	100	R,M,SC		0.80		
SFAM	102	RS	FAM/EP INTRO		1.5	*	S	1	D	101			0.80		
SFAM	103	LS	FAM/EP INTRO		1.5	*	S	1	D	102	R,M,SC		0.80		
FAM	104	RS	FAM INTRO	2.0		*	A	1	D	103			0.80		
FAM	105	LS	FAM/FLT EMERG INTRO	2.0		*	A	1	D	104			0.80		
FAM	106	RS	FAM REVIEW	2.0		*	A	1	D	105	R,M,SC		0.80		
FAM	108	OS	AUTO/HAE REVIEW	2.0		*	A	1	D	106	R, SC		0.80		
FAM	109	OS	FAM REVIEW	2.0		*	A	1	N*	108			0.80		
SFAM	110	OS	CRM REVIEW		1.5	*	S	1	D	109, ANNUAL CRM TRAINING	R,M,SC		0.80		
SFAM	111	LS	NVD FAM INTRO		1.5	*	S	1	NS	110, NIGHT LAB COMPLETE			0.80		
SFAM	112	RS	NVD FAM INTRO		1.5	*	S	1	NS	111	SC		0.80		
FAM	113	LS	NVD FAM REVIEW	2.0		*	A	1	NS	112			0.80		
FAM	114	RS	NVD FAM REVIEW	2.0		*	A	1	NS	113	R,M,SC		0.80		
FAM	115	LS	FAM REVIEW	2.0		*	A	1	D	114			0.80		
FAM	116	RS	FAM REVIEW	2.0		*	A	1	D	115	R,M,SC		0.80		
FAM	117	OS	FAM EVALUATION	2.0		*	A	1	D	116	R,SC	E	1.00		
				20.0	**10.5**								**13.80**		
INST															
SINST	120	OS	INST MANEUVER INTRO		1.5	*	S	1	D	110, INST ICW COMP			0.80		
SINST	121	OS	INST NAV INTRO		1.5	*	S	1	D	120	R,SC		0.80		
SINST	122	OS	GCA INTRO		1.5	*	S	1	D	120			0.80		
INST	123	OS	INST REVIEW	2.0		*	A	1	(N*)	120			0.80		
INST	124	OS	INST EVALUATION	2.0		*	A	1	(N*)	120-123	R,M,SC	E	1.00		
				4.0	**4.5**								**4.20**		
FORM															
SFORM	130	OS	FORM INTRO		1.5	*	S	2	(NS)	11O, FORM ICW COMPLETE			0.80		
FORM	131	OS	FORM/TAC FORM INTRO	2.0		*	A	2	D	130	R		0.80		
SFORM	132	OS	DIV FORM INTRO		1.5	*	S/A	3+	D	131			0.80		
FORM	133	OS	NVD FORM INTRO	2.0		*	A	2	NS	114,131			0.80		
				4.0	**3.0**								**3.20**		
TERF															
STERF	140	LS	TERF INTRO		1.5	*	S	1	(NS)	110			0.80		
TERF	141	RS	TERF INTRO	2.0		*	A	1	D	140	R,M,SC		0.80		
TERF	142	LS	NVD TERF INTRO	2.0		*	A	1	NS	114,141	R		0.80		
				4.0	**1.5**								**2.40**		

UH-1Y																
100 SERIES CORE SKILL INTRODUCTION																
STAGE	TRNG CODE	SEAT	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
NAV															
SNAV	150	OS	TAMMAC NAV INTRO		1.5	*	S	1	D	110	R,M,SC		0.80		
NAV	151	OS	TERF NAV INTRO	2.0		*	A	2	D	141,150			0.80		
NAV	152	OS	NVD NAV INTRO	2.0		*	A	2	NS	142,151			0.80		
				4.0	**1.5**								**2.40**		
SWD															
SSWD	160	OS	BCWD INTRO		1.5	*	S	1	D	110	R,M,SC		0.80		
SWD	161	OS	BCWD INTRO	2.0		*	A	2	D	131,151,160			0.80		
SWD	162	OS	BCWD REVIEW	2.0		*	A	2	D	161			0.80		
				4.0	**1.5**								**2.40**		
TCT															
STCT	170	OS	ASE INTRO		1.5	*	S	1	D	110			0.80		
				0.0	**1.5**								**0.80**		
TAC															
TAC	181	OS	CAL/HIE INTRO	2.0		*	A	1	D	110			1.00		
TAC	182	OS	TAC CAL INTRO	1.5		*	A	1	D	181	R,SC		1.00		
TAC	183	OS	NVD CAL INTRO	2.0		*	A	1	NS	114,182	R,M,SC		1.00		
TAC	184	OS	EXTERNAL INTRO	1.5		*	A	1	D	110			1.00		
				7.0	**0.0**								**4.00**		
CSIX															
SCSIX	190	OS	EP TRAINER		1.5	*	S	1	D	PHASE COMPLETE	R,M,SC	E	0.80		
CSIX	191	OS	CORE SKILL INTRO CHECK	2.0		*	A	1	D	190	R,M,SC	E	1.00		
				2.0	**1.5**								**1.80**		
TOTAL FLT/SIM HOURS FOR STAGE				**49.0**	**25.5**						**TOTAL CRP FOR STAGE**		**35.00**		

UH-1Y															
200 SERIES CORE SKILL BASIC															
STAGE	TRNG CODE	SEAT	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/COR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
TERF															
TERF	200	OS	REVIEW TERF	2.0		120	A	2	D				0.60		210
TERF	201	OS	REVIEW NVD TERF	2.0		120	A	2	NS	200	R	E	0.60	200	
				4.0	**0.0**								**1.20**		
TCT															
STCT	210	OS	INTRO ASE RADAR/IR		1.5	*	S	1	(NS)						300
STCT	211	OS	TAC EMPLOYMENT ASE		1.5	365	S/A	2	(NS)	210	R		1.20	210	
				0.0	**3.0**								1.20		
REC															
SREC	220	OS	INTRO RECCE		1.5	*	S	1	(NS)						230
REC	221	OS	REVIEW RECCE	2.0		365	A	2	NS	201,220	R		1.20	200,201,220	
				2.0	**1.5**								**1.20**		
CAL															
CAL	230	OS	SECTION CAL	2.0		180	A	2	D	201	R		0.60	200,220	220
CAL	231	OS	NVD SECTION CAL	2.0		180	A	2	NS	230			0.60	200,201,220,221,230	221
CAL	232	OS	NVD SECTION CAL REVIEW	2.0		180	A	2	NS	231	R		0.60	200,201,220,221,230,231	
				6.0	**0.0**								**1.80**		
FCLP															
SFCLP	240	OS	INTRO FCLP		1.5	365	S	1	(N)				0.60		430
FCLP	241	OS	DAY FCLP	1.0		365	A	1	D	240	R		0.60	240	431
FCLP	242	OS	NIGHT FCLP	1.0		365	A	1	NS	241	R		0.60	240,241	432
				2.0	**1.5**								**1.80**		
SWD															
SSWD	250	OS	RKT/FIXED FWD GUN		1.5	365	S	1	D				0.60	220	240
SWD	251	OS	CREW SERVED WPNS	2.0		180	A	2	D	201,250			0.60	200,220	241
SWD	252	OS	RKT/GUN DELIVERY	2.0		180	A	2	D	201,250	R		0.60	200,220,250,251	
SWD	253	OS	NVD CREW SERVED WPNS	2.0		180	A	2	NS	251			0.60	200,201,220,221,251	242
SWD	254	OS	NVD RKT/GUN DELIVERY	2.0		180	A	2	NS	252	R		0.60	200,201,220,221,250,251,252,253	
				8.0	**1.5**								**3.00**		
ESC															
SESC	260	OS	DEMO/INTRO ESC		1.5	365	S	2	D				0.60	220,250	250
ESC	261	OS	ASPT ESC	2.0		365	A	2	D	201,260			0.60	200,220,250,260	250
ESC	262	OS	NVD ASPT ESC	2.0		365	A	2	NS	261	R		0.60	200,201,220,221,250,260,261	251
ESC	263	OS	SFC ESC	2.0		365	A	2	(NS)	201,260	R		0.60	200,220,250,260 (201,221)	252
				6.0	**1.5**								**2.40**		
OAS															
SOAS	270	OS	INTRO CAS		1.5	365	S	2	(NS)	220,250			0.60	220,250	243
OAS	271	OS	RWCAS	2.0		120	A	2	D	201,252,270	R		0.60	200,220,252,270	243
OAS	272	OS	INTRO URBAN CAS	2.0		365	A/S	2	(NS)	270	R		0.60	200,220,251,252,270 (253,254)	
OAS	273	OS	NVD RWCAS	2.0		180	A	2	NS	254,271	R	E	0.60	200,201,220,221,251,252,253,254,270,271	
				6.0	**1.5**								**2.40**		
TOTAL FLT/SIM HOURS FOR STAGE				**34.0**	**10.5**					**TOTAL CRP FOR STAGE**			**15.0**		

UH-1Y															
300 SERIES CORE SKILL ADVANCED															
STAGE	TRNG CODE	SEAT	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
ANSQ															
SANSQ	300	RS	NVD A/C EMERG		1.5	365	S	1	NS	NSQ(HLL)			0.50		310
ANSQ	301	RS	NVD FAM/NAV	2.0		180	A	1	NS	300	R		1.00	300	
ANSQ	302	OS	NVD TACFORM/TERF NAV	2.0		180	A/S	2	NS	301			1.00	200,201,220,221,300,301	312
ANSQ	303	OS	NVD NAV/CALS	2.0		180	A	2	NS	301	R		1.00	200,201,220,221,230,231, 232,300,301,302	
SANSQ	305	OS	NVD ORD DELIVERY		1.5	180	S	1	NS	301	R		0.50	220,250,300	320
ANSQ	306	OS	NVD ORD REVIEW	2.0		180	A	2	NS	305	R	E	1.00	200,201,220,221,250,253, 254,300,301,302,305	
				8.0	**3.0**								**5.00**		
ASSAULT SUPPORT															
ASPT	310	OS	FASTROPE/RAPPEL	2.0		730	A	1	D				1.00	200	Both 403 404
ASPT	311	OS	NVD FASTROPE/RAPPEL INTRO	2.0		365	A	1	NS	232,310 (306 IF LLL)	R		1.00	200,201,310	
SASPT	312	OS	INSERT/EXTRACT		1.5	365	S	2	(NS)	232			0.50	220	261
ASPT	313	OS	ASSAULT SUPPORT URBAN ENVIRONMENT	2.0		365	A	2	(NS)	272,312			1.00	200,220,230,250,272,312 (201,221,231,232)	261
ASPT	314	OS	NVD INSERT/EXTRACT	2.0		180	A	2	NS	232,312 (306 IF LLL)	R		1.00	200,201,220,221,230,231, 232,312,313 (301,302,303 if LLL)	
ASPT	315	OS	TRAP MISSION	2.0		730	A	2	(NS)	232			1.00	200,220,230,250 (201,221, 231,232)	323
ASPT	316	OS	NVD ESCORT	2.0		365	A	2	NS	262	R		1.00	200,201,211,220,221,250, 260,261,262,315	322
ASPT	317	OS	C&C	2.0		*	A	1	(NS)	232			1.00	200,220,230 (201,221,231, 232)	260
				14.0	**1.5**								**7.50**		
OAS															
SOAS	320	OS	OAS LOW/MED THREAT		1.5	365	S/A	2	(NS)	200 LEVEL COMPLETE			0.50	211,220,250,270	
OAS	322	OS	CAS	2.0		180	A	2	(NS)	320 (306 IF LLL)	R		1.00	200,211,220,250,251,252, 270,271,272,320,323 (201,221,253, 254,273,320)	325
OAS	323	OS	NVD OAS (ILLUM)	2.0		730	A	2	NS	306 (IF LLL),320	R		1.00	200,201,211,220,221,250, 251,252,253,254,320 (LLL 302,305,306)	321
				4.0	**1.5**								**2.50**		
FAC (A)															
SFACA	330	OS	IDF CONTROL		1.5	365	S/A	1	(NS)	649	R		1.00	220,250,270	340
FACA	331	OS	RW CONTROL	2.0		90	A	2	(NS)	649	R		1.00	200,220,250,251,252,270, 271,320,322 (201,221,254, 273)	343
FACA	332	OS	FW CONTROL	2.0		365	A	2	D	649	R		1.00	200,220,250,251,252,270, 271,320,322,331	341
FACA	333	OS	NVD FW CONTROL	2.0		365	A	2	NS	649	R		1.00	200,201,220,221,250,251, 252,253,254,270,271,273, 320,321,322,331,332	342
FACA	334	OS	SPT ARMS CONSOLIDATION	2.0		365	A	2	(NS)	DESG-649 330-333	R	E	1.00	200,220,250,251,252,270, 271,320,322,330,331,332 (201,221,253,254,273,321, 333)	343
				8.0	**1.5**								**5.00**		
TOTAL FLT/SIM HOURS FOR STAGE				**34.0**	**7.5**	**TOTAL CRP FOR STAGE**							**20.00**		

UH-1Y														
400 SERIES CORE SKILL PLUS														
STAGE	TRNG CODE	SEAT	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
ASSAULT SUPPORT															
ASPT	400	OS	INTRO PARADROPS OPS	1.0		*	A	1	(NS)						400
ASPT	401	OS	INTRO WATER INSERTION	1.5		*	A	1	D						401
ASPT	402	OS	INTRO SPIE	1.5		730	A	1	D	201	R		0.6	200,220,230	402
SASPT	403	OS	MAL INTRO		1.5	*	S	1	D	201				220	
ASPT	404	OS	MAL REVIEW	2.0		365	A	1	(NS)	403	R		0.6	200,220,403 (201,221)	451
ASPT	405	OS	EMERG HOIST/EXTERNAL LOADS	1.5		*	A	1	D	201	R				
				7.5	**1.5**								**1.2**		
SPMSN															
SSPMSN	410	OS	INTRO SAR/OVER LAND TECHNIQUES		1.5	730	S	1	(NS)	405	R		0.4		
SPMSN	411	OS	INTRO SNIPER OPS	1.5		*	A	1	(NS)	251(253)					
				1.5	**1.5**								**0.4**		
OAS															
SOAS	412	OS	AIC/GCI		1.5	730	S/A	2	D		R		0.2	211,220,250	
OAS	413	OS	HELO ESC MED/HI	2.0		730	A	2	(NS)	649	R		0.4	200,211,220,250,251,252, 260,261,320 (201,221,253, 254,262,321)	
SOAS	414	OS	AR		1.5	*	S/A	2	(NS)	649	R			211,220,250,320 (305)	
OAS	415	OS	SCAR	2.0		*	A	2	(NS)	649				200,211,220,250,251,252, 320,414(201,221,253,254)	
OAS	416	OS	URBAN OAS	2.0		730	A	2	D	272,631			0.5	200,211,220,250,251,252, 270,271,272,320,322	
OAS	417	OS	URBAN OAS NIGHT	2.0		730	A	2	NS	416	R		0.5	200,201,211,220,221,250, 251,252,253,254,270,271, 272,273,320,322,323,416	
				8.0	**3.0**								**1.6**		
DACM															
SDACM	430	OS	A/A GUNNERY		1.5	730	S/A	1	D	251			0.2	211,220	410
DACM	431	OS	1V1 RW	2.0		730	A	1	D				0.2	211,220	411
DACM	432	OS	2V1 RW	2.0		730	A	2	D	431	R	E	0.3	211,220,430,431	
DACM	434	OS	1V1 FW	2.0		730	A	1	D		R		0.2	211,220	414
DACM	435	OS	2V2 FW	2.0		730	A	2	D	434	R	E	0.3	211,220,434	416
				8.0	**1.5**								**1.2**		
NBC															
SNBC	440	OS	AR-5		1.0	*	S	1	D		R				420
				0.0	**1.0**								**0.0**		
CQ															
CQ	450	RS	DAY CQ	1.0		365	A	1	D	241	R		0.2	240,241	433
CQ	451	RS	NVD CQ	1.0		365	A	1	NS	242,450	R	E	0.2	240,241,242,450,452	434
SCQ	452	RS	UNAIDED CQ		1.0	365	S/A	1	N*	450	R		0.2	240	435
				2.0	**1.0**								**0.6**		
TAC															
TAC	470	OS	CONDUCT TAC(A) PROCEDURES	2.0		*	A	1	(NS)	613,679		E		317	470
				2.0	**0.0**								**0.0**		
TOTAL FLT/SIM HOURS FOR STAGE				**29.0**	**9.5**					**TOTAL CRP FOR STAGE**			**5.0**		

UH-1Y														
500 SERIES INSTRUCTOR UNDER TRAINING														
STAGE	TRNG CODE	SEAT	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
BIP															
SBIP	500	OS	EMERG PROC STANDARDIZATION		1.5	*	S	1	D	602,649	R		*		
SBIP	501	LS	FAM MANEUVERS REVIEW		1.5	*	S/A	1	(N*)	500	R		*		
SBIP	502	LS	INSTRUMENT REVIEW		1.5	*	S/A	1	(N*)	500	R		*		503
BIP	503	LS	IUT FORMATION FLT REVIEW	2.0		*	A	2	D	500			*		504
BIP	504	LS	FAM/CAL MANEUVERS REVIEW	2.0		*	A	2	D	500-503	R	E	*		
				4.0	**4.5**								**0.0**		
TERFI															
STERF	510	OS	TERF MANEUVERS		1.5	*	S/A	1	D	680			*		510
TERF	511	OS	TERF NAV	2.0		*	A	2	D	510	R	E	*		511
				2.0	**1.5**								**0.0**		
WTO															
SWTO	520	LS	ROCKET/GUN/SYSTEMS REVIEW		1.5	*	S	1	D	681	R		*		
WTO	521	LS	SYS INTEGRATION	2.0		*	A	2	D	520			*		521
WTO	522	LS	TACT MISSION INSTRUCTION	2.0		*	A	2	D	521	R	E	*		
				4.0	**4.5**								**0.0**		
FAC(A)I															
FAC(A)I	540	OS	FAC(A) IUT	2.0		*	A	2	(NS)	613,682,696			*		540
FAC(A)I	541	OS	FAC(A)I CHECK	2.0		*	A	2	(NS)	540	R	E	*		541
				4.0	**0.0**								**0.0**		
NSSI															
NSSI	550	OS	FAM	1.0		*	A	1	NS	612,SAR HAC			*		550
NSSI	551	OS	CALS / NAV	1.0		*	A	1	NS	550,612,SAR HAC			*		551
NSSI	552	OS	NSSI CHECK	2.0		*	A	1	NS	550,551,612,SAR HAC	R	E	*		552
				4.0	**0.0**								**0.0**		
NSFI															
NSFI	560	OS	NSFI NAV AND TERF IUT	2.0		*	A	1	NS	612,681			*		560
NSFI	561	OS	NSFI FORM IUT	2.0		*	A	2	NS	560			*		561
NSFI	562	OS	NSFI CHECK	2.0		*	A	1	NS	561	R	E	*		562
				6.0	**0.0**								**0.0**		
TAC(A)I															
TAC(A)I	570	OS	TAC(A)I CHECK	2.0		*	A	1	(NS)	470,679,683	R	E	*		570
				2.0	**0.0**								**0.0**		

UH-1Y														
500 SERIES INSTRUCTOR UNDER TRAINING														
STAGE	TRNG CODE	SEAT	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
DACMI															
DACMI	580	OS	1V1 & 2V1 RW IUT	2.0		*	A	2	D	614,615,682			*		580
DACMI	581	OS	1V1 &2V2 FW IUT	2.0		*	A	2	D	614,615,682			*		581
DACMI	582	OS	RW CHECK	2.0		*	A	2	D	580	R	E	*		582
DACMI	583	OS	FW CHECK	2.0		*	A	2	D	581	R	E	*		583
				8.0	**0.0**								**0.0**		
NSI															
NSI	590	OS	NSI IUT FAM	1.0		*	A	1	NS	612,682			*		590
NSI	591	OS	NSI IUT NAV	1.0		*	A	1	NS	612,682			*		591
NSI	592	OS	NSI IUT TACFORM/ORD	2.0		*	A	2	NS	590,591			*		592
NSI	593	OS	NSI IUT TACFORM/ORD	2.0		*	A	2	NS	592	R		*		593
NSI	594	OS	NSI CHECK	2.0		*	A	2	NS	593	R	E	*		
				8.0	**0.0**								**0.0**		
TOTAL FLT/SIM HOURS FOR STAGE				**42.0**	**7.5**	**TOTAL CRP FOR STAGE**							**0.0**		

UH-1Y																
600 SERIES																
STAGE	TRNG CODE	SEAT	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
RQRD															
RQRD	600	OS	ANNUAL INST CHECK	1.5		365	A/S	1	(N*)	IAW OPNAVINST 3710		E	*		600
RQRD	601	OS	ANNUAL NATOPS CK	1.5		365	A	1	(N)	IAW NATOPS, 602		E	*		
SRQRD	602	OS	A/C EMERG SYS REVIEW		1.5	180	S	1	D			E	*		
				3.0	**1.5**								**0.0**		
QUAL															
QUAL	610		TERF TRACK QUAL				A	1	NS	200-201 COMPLETE		E	*		
QUAL	611		NSQ (HLL) TRACK CODE				A	1	NS	201,221,231,232,253,254		E	*		
QUAL	612		NSQ (LLL) TRACK CODE				A	1	NS	300,301,302,303,305,306		E	*		
QUAL	613		FAC(A) TRACK CODE				A	1	(NS)	330-334, 649		E	*		
QUAL	614		RWDACM TRACK CODE				A	2	D	431-432		E	*		
QUAL	615		FWDACM TRACK CODE				A	2	D	434-435		E	*		
QUAL	616		CQ TRACK CODE				A	1	D/N*/NS	450-451		E	*		
QUAL	617		TAC(A) TRACK CODE				A	1	(NS)	613,679		E	*		
				0.0	**0.0**								**0.0**		
DESG															
DESG	630		PQM			*	A	1	(N)	191		E	*		
DESG	631		UHC EVAL	2.0		*	A	1	(NS)	CORE SKILL BASIC COMPLETE, ANSQ, ASPT, AND OAS OF THE CORE SKILL ADVANCED COMPLETE THROUGH 323	R	E	*		
DESG	632	RS	FCP TRACK CODE	1.5		*	A	1	D	630		E	*		
DESG	640	OS	DAY SECTION LEADER TRACK CODE	2.0		*	A	2	D	631			*		
DESG	641	OS	NIGHT SECTION LEADER TRACK CODE	2.0		*	A	2	NS	640			*		
DESG	649	OS	SECTION LEADER EVAL TRACK CODE	2.0		*	A	2	(NS)	641	R	E	*		
DESG	650	OS	DAY DIV LEAD TRACK CODE	2.0		*	A	3+	D	649			*		
DESG	651	OS	NIGHT DIV LEAD TRACK CODE	2.0		*	A	3+	NS	650			*		
DESG	659	OS	DIV LEAD EVAL TRACK CODE	2.0		*	A	3+	(NS)	651	R	E	*		
DESG	669	OS	FLT LEAD EVAL	2.0		*	A	5+	(NS)	659	R	E	*		
DESG	679		AMC EVAL			*			(NS)	659	R	E	*		
				17.5	**0.0**								**0.0**		
IDSG															
IDSG	680		BIP			*	A	1	D	500-504		E	*		
IDSG	681		TERFI			*	A	1	D	510-511		E	*		
IDSG	682		WTO			*	A	2	D	520-522		E	*		
IDSG	683		FAC(A)I			*	A	2	(NS)	540,541		E	*		
IDSG	688		DACM(I)			*	A	2	D	580,581,582,583		E	*		
IDSG	689		TAC(A)I			*	A	1	(NS)	570		E	*		
IDSG	693		NSSI			*	A	1	NS	552		E	*		
IDSG	694		NSFI			*	A	1	NS	562		E	*		
IDSG	696		NSI			*	A	2	NS	594		E	*		
IDSG	699		WTI			*	A	1	(NS)	IAW MAWTS-1 WTI COURSE		E	*		
				0.0	**0.0**								**0.0**		
TOTAL FLT/SIM HOURS FOR STAGE				**20.5**	**1.5**	**TOTAL CRP FOR STAGE**							**0.0**		

UH-1Y															
700 SERIES															
STAGE	TRNG CODE	SEAT	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
SOTC															
SOTC	713		LIVE GUIDED ROCKET TRACK CODE				A	1	(NS)				*		
				0.0	**0.0**								**0.0**		
			TOTAL FLT/SIM HOURS FOR STAGE	**0.0**	**0.0**				**TOTAL CRP FOR STAGE**				**0.0**		

171. T&R QUICK REFERENCE

UH-1Y T&R CODES QUICK REFERENCE

TERF	200	DAY TERF
	201	NVG TERF
TCT	S210	INTRO ASE
	S211	ASE EMPLYMNT[2]
REC	S220	INTRO VR
	221	NVG VR
CAL	230	SECTION CAL
	231	NVD SECT CAL
	232	NVD CAL REVIEW
FCLP	S240	INTRO FCLP
	241	DAY FCLP[3]
	242	NVG FCLP[3]
SWD	S250	RKT/FFGUN
	251	CREW SERVED
	252	RKT/GUN
	S253	NVD CREW SERV
	254	NVD RKT/GUN
ESC	S260	INTRO ESC
	261	ASPT ESC
	262	NVG ASPT ESC
	263	SURFACE ESC[1]
OAS	S270	CAS INTRO
	271	DAY CAS
	272	URBAN CAS[2,3]
	273	NVG CAS
ANSQ	S300	LLL EP SIM
	301	LLL FAM/NAV
	302	LLL FORM/TNAV[3]
	304	LLL CALS
	S305	LLL RKT/GUN
	306	LLL ORD REVIEW
ASPT	310	FR/RAP
	311	NVD FR/RAP
	S312	INSERT/EXTRACT
	313	URBAN IN/EX[1]
	314	NVD IN/EX
	315	TRAP[1]
	316	NVD ESCORT
	317	C&C[1]
OAS	S320	OAS LOW/MED[1,2]
	322	CAS[1]
	323	ILLUM
FAC(A)	S330	CFF[2]
	331	R/W[1]
	332	DAY F/W
	333	NVG F/W
	334	COMB ARMS

ASPT	400	PARADROPS[1]
	401	WATER INSERT
	402	SPIE
	S403	MAL INTRO
	404	MAL REVIEW[1]
	405	HOIST/EXTERNAL
SPMSN	S410	SAR[1]
	411	SNIPER OPS[1]
OAS	S412	AIC/GCI[2]
	413	HELO ESC[1]
	S414	AR[12]
	415	SCAR[1]
	416	DAY MOUT
	417	NVG MOUT
DACM	430	A/A GUNNERY
	431	1V1 RW
	432	2V1 RW
	434	1V1 FW
	435	2V2 FW
NBC	S440	AR-5 FAM
CQ	450	DAY CQ
	451	NVG CQ
	S452	UNAIDED CQ[2]
TAC	470	TAC(A)[1]
BIP	S500	EP IUT SIM
	S501	FAM IUT[2]
	S502	INST IUT[12]
	503	FORM IUT
	504	FAM/CAL REVIEW
TERF	S510	TERF MANVRS[2]
	511	TERF NAV IUT
WTO	S520	SYS REVIEW
	S521	SYS INTEGRATION
	522	TAC MSN INSTR
FAC(A)I	540	FAC(A) IUT[1]
	541	FAC(A)/CFF IUT[1]
NSSI	550	NVG FAM
	551	NVG NAV/CAL
	552	NSSI CHECK
NSFI	560	NVG TERF/NAV IUT
	561	NVG FORM IUT
	562	NSFI CHECK
TAC(A)I	570	TAC(A)I CHECK
DACMI	580	1V1/2V1 RW IUT
	581	1V1/2V2 FW IUT
	582	RW IUT CHECK
	583	FW IUT CHECK
NSI	590	NVG FAM
	591	NVG NAV
	592	NVG FORM
	593	LLL TACTICS/ORD
	594	NSI CHECK

RQRD	600	INST CHECK[13]
	601	NATOPS CHECK[1]
	S602	EP SIM
QUAL	610	TERF QUAL
	611	HLL QUAL
	612	LLL QUAL
	613	FAC(A) QUAL
	614	RW DACM QUAL
	615	FW DACM QUAL
	616	CQ QUAL
	617	TAC(A) QUAL[1]
DESG	630	PQM DESGN[1]
	631	UHC EVAL
	632	FCP DESGN
	640	SL DAY
	641	SL NVG
	649	SL EVAL
	650	DL DAY
	651	DL NVG
	659	DL EVAL
	669	FL EVAL
	679	AMC EVAL
IDSG	680	BIP DESGN
	681	TERF(I) DESGN
	682	WTO DESGN
	683	FAC(A)I DESGN
	688	DACMI DESGN
	689	TAC(A)I DESGN
	693	NSSI DESGN
	694	NSFI DESGN
	696	NSI DESGN
	699	WTI DESGN
SOTC	713	APKWS RKT
	1A2	INST
	1A3	FCLP
	1A4	CQ
	1A6	AIR COMBAT
	1A7	ATTACK
	1A9	NVGS
	1B6	DACMI(UT)
	1B7	FAC(A)I(UT)
	1B9	NSI(UT)
	2K2	FCF
	2K4	BOGEY SUPPORT
	2L3	INST CHECK
	2L4	NATOPS CHECK
	2M4	SUPPORT HOPS
@	6S2	PLANNED ATTACK
@	6T2	ARMED RECCE

1	NIGHT OPTIONAL
2	SIM PREFERRED, A/C OPTIONAL
3	A/C PREFERRED/SIM OPTIONAL
@	COMBAT ONLY

CHAPTER 2

UH-1Y CREW CHIEF/AERIAL OBSERVER

FIGURES

CHAPTER 2

UH-1Y CREW CHIEF/AERIAL OBSERVER

200. MARINE LIGHT ATTACK SQUADRON (HMLA) UNIT CORE COMPETENCY. Marine Aviation plays a crucial role in the MAGTF's ability to conduct Maneuver Warfare. The ultimate goal of Marine Aviation is to attain the highest possible combat readiness to support Expeditionary Maneuver Warfare while at the same time preserving and conserving our Marines and equipment. Embedded within our combat readiness is the ability to rapidly, effectively, and efficiently deploy on short notice and the ability to quickly and effectively plan for crises and/or contingency operations thereby ensuring Marine Aviation remains ready for combat when and where the need arises. The T&R Program Manual represents the collaborative effort of Marine Aviation Subject Matter Experts who designed training standards to maximize combat capabilities. These standards, intrinsic in the core competency section, describe and define unit capabilities and requirements necessary to maintain like-squadron proficiency in core skills and combat leadership. Training events are based on specific requirements and performance standards to ensure aircrew maintain a common base of training and depth of combat capabilities. Together, the T&R comprises a building block approach to ensure that trained aircrews remain ready, relevant, and fully capable of supporting the MAGTF commander.

1. HMLA Mission. Support the MAGTF Commander by providing offensive air support, utility support, armed escort and airborne supporting arms coordination, day or night under all weather conditions during expeditionary, joint or combined operations.

2. UH-1 Mission Essential Task List (METL)

a. (UJTL TA 1.1.2) Conduct Shipboard Deck helicopter Landing Qualifications

b. (UJTL TA 1.1.4) Conduct Sea and Air Deployment Operations
- Maintain the capability to deploy and operate from advanced bases, expeditionary airfields, Forward Operating Bases (FOBs), and naval shipping.
- Perform organizational maintenance on assigned aircraft.

c. (UJTL TA 1.2.1) Conduct Air Assault Operations and Air Assault
- Provided assault support transport of combat troops.
- Provide support for casualty evacuation operations.
- Provide armed escort for assault helicopters.

d. (UJTL TA 1.2.3) Conduct Amphibious Assault and Raid Operations
- Conduct assault support for maritime special operations.
- Provide armed escort for airborne and surface forces.

e. (UJTL TA 3.2.1) Conduct Fire Support
- Provide fire support for forward and rear area forces against point and area targets.

f. (UJTL TA 3.2.2) Conduct Close Air Support

g. (UJTL TA 3.2.3) Conduct Interdiction Operations
- Conduct armed reconnaissance

h. (UJTL TA 3.2.8) Conduct Air-to-Air Operations
- Maintain self-defense capability from air-to-air threats.

i. (UJTL TA 3.3) Coordinate Battlespace Maneuver and Integrate with Firepower
- Conduct combined arms coordination and control operations.
- Provide airborne command, control and coordination for assault support operations.
- Conduct multi-sensor imagery, visual reconnaissance, and provide Battle Damage Assessment.

j. (UJTL TA 6.2) Conduct Joint Personnel Recovery
- Conduct Tactical Recovery of Aircraft and Personnel (TRAP) operations.
- Augment local Search and Rescue (SAR) assets.

k. (UJTL TA 6.3) Conduct Rear Area Security
- Provide fire support and security for rear area forces.

l. (UJTL TA 6.4) Conduct Noncombatant Evacuation
- Provide Fire Support and escort for evacuation operations.
- Provide support for evacuation operations.

3. Table Of Organization. Refer to Table of Organization 8970 managed by Total Force Structure, MCCDC, for current authorized organizational structure and personnel strength. As of this publication date, HMLA units are authorized:

HMLA SQUADRON
18 AH-1Z, 9 UH-1Y
Pilots: 44 AH-1Z, 23 UH-1Y
19 Crew Chiefs
17 Aerial Gunners/Observers

HMLA DETACHMENT
6 AH-1Z & 3 UH-1Y
Pilots: 14 AH-1Z, 7 UH-1Y
5 Crew Chiefs
5 Aerial Gunners/Observers

4. Core Capability. A core capable HMLA unit is able to sustain the number of sorties listed below on a daily basis during contingency/combat operations. The sortie rates are based on 1.5 hour average sortie duration and assumes $\geq$ 70 percent FMC aircraft and $\geq$ 90 percent T/O aircrew on hand. If unit FMC aircraft < 70 percent or T/O aircrew < 90 percent, core capability will be degraded by a like percentage. A core capable unit is able to accomplish all tasks designated in the unit METL from a main base, expeditionary base, or amphibious platform.

a. Core Capable Squadron. A Core Capable HMLA squadron is able to sustain 30 AH-1Z and 15 UH-1Y sorties per 24-hour period.

b. Core Capable Squadron (-). A Core Capable squadron (-) is able to sustain 21 AH-1Z and 10 UH-1Y sorties per 24-hour period.

c. Core Capable Detachment. A Core Capable detachment is able to sustain 10 AH-1Z and 5 UH-1Y sorties per 24-hour period.

5. METL/Core Skill Matrix. UH-1 core skills directly support the METL as follows:

	CORE SKILL											CORE PLUS SKILL				
METL	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC(A)	SPMSN	DACM	NBC	CQ	TAC
a. Conduct Shipboard Deck helicopter Landing Qualifications				X											X	
b. Conduct Sea and Air Deployment Operations				X											X	
c. Conduct Air Assault and Air Assault Operations	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
d. Conduct Amphibious Assault & Raid Operations	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
e. Conduct Fire Support	X	X	X		X	X	X	X	X		X			X		X
f. Conduct Close Air Support	X	X			X	X	X	X	X		X			X		
g. Conduct Interdiction Operations	X	X			X		X	X	X		X			X		
h. Conduct Air-to-Air Operations	X				X	X							X			
i. Coordinate Battlespace Maneuver and Integrate w/ Firepower	X	X			X	X	X	X	X	X	X					X
j. Conduct Joint Personnel Recovery	X	X	X		X	X	X	X	X	X	X	X			X	
k. Conduct Rear Area Security	X	X	X		X	X	X	X	X	X	X	X		X	X	
l. Conduct Noncombatant Evacuation	X	X	X		X	X	X	X	X	X	X	X			X	

6. UH-1Y Core Model Minimum Requirements. Squadron core competency reflects the minimum level of competency a squadron must achieve to perform its core capability. Squadron core competency is measured in terms of minimum Core Skill Proficiency (CSP) and minimum numbers of flight leaders per paragraphs (a) and (b) below:

a. Minimum Unit CSP Requirements. As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of UH-1Y crews who are proficient in each core skill (Unit CSP). In order to be considered proficient in a core skill (individual CSP), a UH-1Y crewmember must attain and maintain proficiency in core skill events, as delineated in paragraphs (1) and (2) below. The standard UH-1Y crew consists of 2 Pilots, a Crew Chief, and an AO/AG.

NOTE: SPMSN, DACM, NBC, CQ and TAC are core plus skills. Proficiency in these skills is not required to obtain unit CSP and will not contribute to unit T-level readiness.

	UH-1Y Unit CSP Requirements Squadron			
Core Skill Core Plus	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	12	6	6	6
TCT	6	3	3	3
REC	12	--	--	6
CAL	12	6	6	6
FCLP	4	2	2	2
SWD	10	5	5	5
ESC	10	5	5	5
OAS	8	4	4	4
NS HLL	12	6	6	6
ANSQ	8	4	4	4
ASPT	12	6	6	6
FAC(A)**	4	--	--	4
ASPT	4	2	2	2
SPMSN	3	2	2	2
OAS	4	2	2	2
DACM	6	3	3	3
NBC	2	1	1	1
CQ	4	2	2	2
TAC	4	2	2	2

** A FAC(A) capable crew requires 1 FAC(A) per aircraft.

	UH-1Y Unit CSP Requirements Squadron (-)			
Core Skill Core Plus	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	8	4	4	4
TCT	4	2	2	2
REC	8	--	--	4
CAL	8	4	4	4
FCLP	2	1	1	1
SWD	6	3	3	3
ESC	6	3	3	3
OAS	4	2	2	2
NS HLL	8	4	4	4
ANSQ	4	2	2	2
ASPT	8	4	4	4
FAC(A)**	2	--	--	2
ASPT	2	1	1	1
SPMSN	2	1	1	1
OAS	2	1	1	1
DACM	2	1	1	1
NBC	2	1	1	1
CQ	2	1	1	1
TAC	2	1	1	1

	UH-1Y Unit CSP Requirements Detachment			
Core Skill Core Plus	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	6	3	3	3
TCT	4	2	2	2
REC	6	--	--	6
CAL	6	3	3	3
FCLP	6	3	3	3
SWD	4	2	2	2
ESC	4	2	2	2
OAS	4	2	2	2
NS HLL	6	3	3	3
ANSQ	4	2	2	2
ASPT	4	2	2	2
FAC(A)	1	--	--	1
ASPT*	1	1	1	1
SPMSN*	1	1	1	1
OAS*	1	1	1	1
DACM*	1	1	1	1
NBC*	1	1	1	1
CQ*	6	3	3	3
TAC*	1	--	--	1

(1) Events Required to Attain Individual CSP. To initially attain CSP, a UH-1 crewmember must successfully complete all of the T&R events listed in the chart below for that core skill.

UH-1Y CC	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	OAS	DACM	NBC	CQ
T&R event requirement to attain CSP T&R event requirement to attain C+SP	200 201R	221R	230R 231 232R	241R 242R	251 252 253 254R 255R 256R	262R 263R	272R 273R 322R	201R 221R 231 232R 254R 255R 256R	301 302 303R 304R 305R 306R	310 311R 313 314R 315 316R	332R 333R	400 401 402R 404R 405R	416 417R	430R 431 432R 434R 435R	440R	450R 451R

UH-1Y AO	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	OAS	DACM	NBC	CQ
T&R event requirement to attain CSP T&R event requirement to attain C+SP	200 201R	221R	230R 232R	241R 242R	251 252 253 254R 255R 256R	263R	273R	201R 221R 232R 254R 255R 256R	301 302 303R 304R 305R 306R	314R 316R	332R 333R	404R	416 417R	430R 431 432R 434R 435R	440R	450R 451R

(2) Events Required to Maintain Individual CSP. To maintain CSP, an individual must maintain proficiency in all of the T&R events listed in the chart below for that core skill.

UH-1Y CC	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	OAS	DACM	NBC	CQ
T&R event requirement to maintain CSP T&R event requirement to maintain C+SP	201R	221R	232R	242R	254R 255R 256R	262R 263R	273R 322R	201R 221R 232R 254R 255R 256R	303R 304R 305R 306R	311R 314R 316R	333R	402R 404R	417R	430R 432R 435R	440R	451R

UH-1Y AO	TERF	REC	CAL	FCLP	SWD	ESC	OAS	NS HLL	ANSQ	ASPT	FAC	ASPT	OAS	DACM	NBC	CQ
T&R event requirement to maintain CSP T&R event requirement to maintain C+SP	201R	221R	232R	242R	254R 255R 256R	263R	273R	201R 221R 232R 254R 255R 256R	303R 304R 305R 306R	314R 316R	333R	404R	417R	430R 432R 435R	440R	451R

7. Qualifications and Designations Tables. The tables below delineate T&R events required to attain initial qualifications and designations. All stage lectures, briefs, squadron training and prerequisites shall be complete prior to completing final events. Qualification and designation letters signed by the commanding officer shall be placed in individual NATOPS and APR/MPR jackets. Loss of proficiency in all qualification events of a core skill

causes the associated qualification to be lost. Regaining a qualification requires completing all R coded syllabus events associated with that qualification.

Qualification	**Initial Event Qualification Requirements.**
NATOPS (RQD-601)	IAW OPNAV 3710.7 and an annual qualification letter signed by the CO.
TERF (QUAL-610)	200, 201
NSQ HLL (QUAL-611)	201, 221, (231 CC), 232, 254, 255, 256,
NSQ LLL (QUAL-612)	301, 302, 303, 304, 305, 306
RWDACM (QUAL-614)	431, 432
FW DACM (QUAL-615)	434, 435
CQ (QUAL-616)	450, 451
AG GAU-16 (QUAL-620)	251, 254, 304, and NSQ LLL
AG GAU-17 (QUAL-621)	252, 255, 305, and NSQ LLL
AG M240 (QUAL-622)	253, 256, 306, and NSQ LLL

Designation	**Designation Requirements**
CC/AO	CSIX-191
CCI (IDSG 680)	500, 504, 681, 682, NSQ LLL
TERFI (IDSG 681)	570, 571
AGI GAU-16 (IDSG 682)	681, NSQ LLL
AGI GAU-17 (IDSG 683)	681, NSQ LLL
AGI M240 (IDSG 684)	681, NSQ LLL
DACMI (IDSG 688)	582, 583
NSSI (IDSG 693)	564
NSFI (IDSG 694)	561
NSI (IDSG 696)	593
WTI (IDSG 699)	IAW MAWTS-1 WTI COURSE

8. Instructor Requirements. A squadron should possess the following numbers of UH-1Y aircrew with the listed instructor designations IAW the UH-1Y T&R and MCO 3500.12 (WTTP). The listed numbers are based on squadron core capability definition.

	Squadron		
INSTRUCTOR DESIGNATION	Pilots	Crew Chiefs	AO/AGs
BIP	4	--	--
TERFI	4	3	--
WTO	4	--	--
NSI	3	3	--
WTI	3	3	--
FAC(A)I	2	--	--
TAC(A)I	1	--	--
DACMI	2	2	--
C/C AGI	--	4	--

	Squadron (-)		
INSTRUCTOR DESIGNATION	Pilots	Crew Chiefs	AO/AGs
BIP	2	--	--
TERFI	2	2	--
WTO	2	--	--
NSI	2	2	--
WTI	2	2	--
FAC(A)I	1	--	--
TAC(A)I	1	--	--
DACMI	1	1	--
C/C AGI	--	3	--

	Detachment		
INSTRUCTOR DESIGNATION	Pilots	Crew Chiefs	AO/AGs
BIP	2	--	--
TERFI	2	1	--
WTO	2	--	--
NSI	1	1	--
WTI	1	1	--
FAC(A)I	1	--	--
TAC(A)I	0	--	--
DACMI	1	1	--
C/C AGI	--	1	--

9. Currency. A control measure used to provide an additional margin of safety based on exposure frequency to a particular skill. It is a measure of time since the last event demanding that specific skill. Loss of currency does not affect a loss of CRP. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for individual type mission profiles can be found in Chapter 4 of the Aviation T&R Program Manual.

10. Proficiency. Proficiency is a measure of achievement of a specific skill. Refly factors establish the maximum time between demonstration of those particular skills. CRP is a measurement of "demonstrated proficiency." If an aircrew member exceeds the refly factor for a particular event, the individual loses CRP for that particular event. To regain proficiency, an individual shall complete the delinquent events with a proficient crewman/flight lead. If an entire unit loses proficiency, unit instructors shall regain proficiency by completing an event with an instructor from a like unit. If not feasible, the instructor shall regain proficiency by completing the event with another instructor. If a unit has only one instructor and cannot complete the event with an instructor from another unit, he shall regain proficiency with another aircraft commander or as designated by his commanding officer.

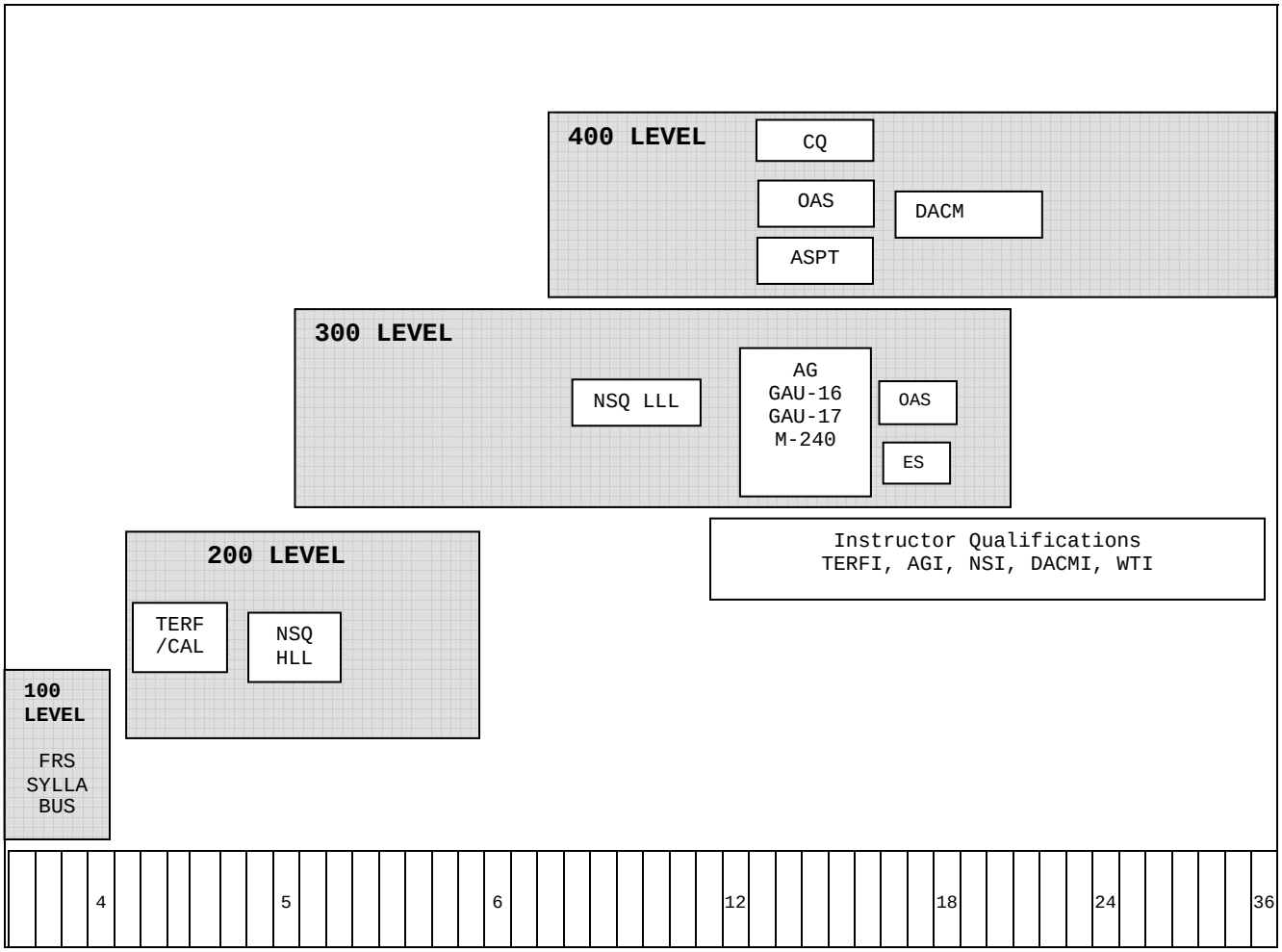

Figure 2-1.--Notional Training Progression Model.

201. PROGRAMS OF INSTRUCTION (POI) FOR BASIC AND TRANSITION CREW CHIEF

WEEKS	COURSE/PHASE	ACTIVITY
1-2	UH-1Y Familiarization	Training Squadron
3-8	Ground School	Training Squadron
9-19	Core Skill Introduction Phase	Training Squadron
20-24	Core Skill Basic Phase	Tactical Squadron
25-28	Core Skill Advanced Phase	Tactical Squadron
29-32	Core Skill Plus Phase	Tactical Squadron

202. POI FOR REFRESHER CREW CHIEF

WEEKS	COURSE/PHASE	ACTIVITY
1-4	UH-1Y Familiarization	Tactical Squadron
5	Ground School	Tactical Squadron
6-11	Core Skill Introduction Phase	Tactical Squadron
12-13	Core Skill Basic Phase	Tactical Squadron
14-15	Core Skill Advanced Phase	Tactical Squadron
16-18	Core Skill Plus Phase	Tactical Squadron

203. POI FOR SERIES CONVERSION CREW CHIEF

WEEKS	COURSE/PHASE	ACTIVITY
1-5	UH-1Y Familiarization	Training Squadron
6-10	Ground School	Training Squadron
11-20	Core Skill Introduction Phase	Training Squadron
21-23	Core Skill Basic Phase	Tactical Squadron
24-26	Core Skill Advanced Phase	Tactical Squadron
27-34	Core Skill Plus Phase	Tactical Squadron

204. POI FOR BASIC/TRANSITION, CONVERSION, SERIES CONVERSION AND REFRESHER AERIAL OBSERVER

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Ground School	Tactical Squadron
3-15	Flight Training	Tactical Squadron

220. GROUND/ACADEMIC TRAINING

COURSE	ACTIVITY
UH-1Y Familiarization	Fleet Replacement Squadron
SERE School	NAS Brunswick, ME/NAS North Island, CA
Appropriate Aerial Gunnery School	Squadron
Aviation Physiology/ Aviation Water Survival	See OPNAVINST 3710.7_

SQUADRON LEVEL TRAINING
Publications and Related Directives
Communications Procedures
Maintenance Procedures
Safety
Weapons Training
MAWTS-1 Academic Support Package
Map Interpretation
Night Vision Device Operation
Search and Rescue
Helicopter Loading
Fueling and Servicing
Equipment Stowing

Helicopter Inspection
Preservation and Cleaning of Helicopter and Corrosion Control
Aircraft Recognition
Troubleshooting (Ground/Inflight)

221. GRADUATE LEVEL COURSES. There are six graduate level courses that qualify instructors for specific portions of the T&R syllabus. Requirements for instructor certification are contained in the MAWTS-1 Course Catalog.

230. GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS

1. General

a. The MAWTS-1 Course Catalogue contains a summary matrix of all Ground, Academic, Simulator, and Flight requirements for each stage of the T&R. This matrix will be put in the Aircrew Performance Record (APR) of all aircrew to thoroughly track training progression. As each training event is completed, the training officer will input the date of completion.

b. All events, to include simulators, shall begin with a comprehensive brief with emphasis on administrative procedures, CRM, tactical procedures, mission performance standards and aircrew expectations.

c. All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance utilizing all evaluation techniques available (e.g., videotape, participating aircrews, external support personnel).

d. An ATF is required for any initial event completed by a Basic, Transition, Conversion, Refresher, Series Conversion, or as recommended by the squadron Standardization Board. If the commanding officer has waived/deferred a syllabus sortie, the squadron training officer shall place a waiver/deferral letter in section 3 of the APR. Standardized ATFs can be obtained by the T&R sponsor, MAWTS-1.

e. All aircrew will have an APR. The squadron training officer shall ensure each ATF is entered in section 3 of the APR.

f. The T&R manual is the Marine Corps aircrew training document. It relates the training requirements and standards for Marine aircrew. When operational commanders assign HML/A squadrons to prolonged commitments where specific T&R training is not available (e.g., MEU deployments, sustained combat deployments), it is expected that degradation in some mission areas will occur. Commanding officers are authorized to defer training in specific missions that are not relevant to their current deployment situation. Once the squadron or detachment has returned from the deployment, every effort should be made to achieve the deferred training for the affected pilots.

g. Compliance with the written flight description is mandatory for syllabus event completion. Per Aviation T&R Program Manual, events may be listed as Aircraft preferred/Simulator optional - A/S, Simulator preferred/Aircraft optional - S/A, Aircraft only - A, or Simulator only - S. In the absence of a flight simulator, completion of a syllabus event is not required to complete that stage. Completion of those events should be accomplished as soon as practicable upon simulator availability. Although a current flight simulator for CC/AO does not exist, a request is in process. By default, all simulator flights will be flown in the aircraft until a suitable simulator becomes available for training. CRM will be stressed and evaluated throughout each stage.

h. Initial syllabus events not annotated with an “N” or “NS” shall be conducted during daylight hours. Simulator events annotated with “D/NS” require both day and night conditions during the hop, unless flown in the aircraft (“S/A”), in which case the event can be flown during day conditions.

Aircrew shall fly events annotated with “N” (Night) or “NS” (Night Systems) at least 30 minutes after official sunset. Events annotated with “(NS)” may be flown during the day or at night. Events annotated with “N*” shall be flown at night unaided.

i. Events annotated as “S/A” that are flown in the aircraft may have external and/or ordnance requirements which are not listed to meet the requirements of the hop. For instance, an STCT hop flown in the aircraft will require expendables.

j. Networked Simulation. Currently no linked door gunner simulator exists for “whole crew” training in the UH-1Y. For future linked simulator training, an approved networked “man-in-the-loop” simulator is required to meet the training objectives. A moving model controlled from an operator station does not satisfy the man-in-the-loop requirement. The pilot and CC/AO simulators must be linked.

k. Crew Chief Under Instruction (CCUI) shall complete the appropriate FRS ground school instruction prior to commencement of flight training.

2. T&R Phases

a. The 200-level phase is considered to be ‘skill’ level training. Completion of the 200-level phase should provide the UH-1Y aircrew with the skills required to execute UH-1Y missions that directly support the unit METL.

b. The 300-level phase is considered to be ‘mission’ level training. Completion of the 300-level phase ensures UH-1Y aircrew are trained to execute missions that support the unit METL.

c. The 400-level phase is considered “Core Plus” training. This phase contains UH-1Y training standards applicable to large scale integrated missions, unique mission areas, or mission areas having a low probability of execution. This phase also trains pilots to be capable of leading/directing flights of numerous aircraft in a complex wartime scenario. Although core plus training events may provide valuable training opportunities, they are not measured as part of the unit reporting.

d. The 500-level phase contains instructor workup and certification syllabus events.

e. The 600-level phase contains requirements, qualifications and designations syllabus events.

f. The 200 and 300-level phases are considered core skills and will be reported as such.

3. T&R Codes

a. In order to log a T&R code, aircrew must satisfactorily complete event requirements IAW assigned Mission Performance Standards. Logging multiple training codes on an initial single sortie shall be avoided. When scheduling sorties, training officers are allowed to schedule additional training codes based on anticipated mission sets if the Performance Standards are met for the sortie, and sufficient time is available during the flight to accomplish those sorties (e.g., 4 hour flight scheduled to conduct two sorties with flight time requirement of 2.0 hours each). If multiple syllabus events are to be accomplished during a single flight evolution, appropriate planning, briefing, and debriefing time must be allotted to ensure that requisite training objectives can be met.

4. Performance Standards

a. Performance standards are listed for each T&R event description. These are training standards for individual aircrew performance and should be utilized by the evaluator as a guideline to determine the satisfactory completion of each event. If the aircrew did not successfully attain the performance standards, the training code shall not be logged as a completed flight and CRP credit shall not be granted until proficiency is demonstrated.

b. All simulators and flight events will be planned, briefed, executed and debriefed IAW UH-1Y NATOPS, ANTTP/NTRP, OPNAVINST 3710, doctrinal publications, the RW TACSOP, and applicable SOPs.

5. Squadron Syllabus Assignment

a. General. The UH-1Y possesses aircraft systems and mission equipment to warrant formalized training for UH-1N pilots in the all phases of training, as opposed to direct introduction to squadron flight lines. In this respect, there are two key concepts identified for the community to effectively upgrade from the UH-1N to the UH-1Y.

(1) First, while the Huey fleet is in transition from legacy to upgrade aircraft, many aircrew having previously completed the Basic POI for the UH-1N will be returning for their second, or subsequent, fleet tours for training in the UH-1Y. It is recognized that previous tactical experience in the UH-1N is applicable toward series conversion training in the UH-1Y. Previously trained UH-1N aircrew will complete series conversion training at the FRS. Once FRS series conversion complete, aircrew will be assigned to the Refresher POI for training at the tactical squadron.

(2) Second, current UH-1N aircrew performing Series Conversion to the UH-1Y, will event convert November events to Yankee events, in accordance with paragraph 170, Event Matrix, based on date last flown in the UH-1N. This will be done regardless of event proficiency status in order for automated training management systems (SARA, M-SHARP) to function properly with respect to POI updating rules, from the aviation Program Manual, for Refresher. In accordance with POI updating rules, in order for all events in a stage to be updated once the R coded events for the stage have been flown, there has to be a previously flown date present, proficient or delinquent, otherwise the event will be recognized as incomplete and must be flown. Certain designations and qualifications, identified by the H-1 Transition Task Force as unaffected by the new aircraft’s systems, may be grandfathered to the UH-1Y at the squadron CO’s discretion. These cases are specified in Paragraph 6.

b. Basic and Transition Syllabus. Basic, Transition, and Conversion aircrew are required to fly the entire syllabus. Refresher and Series Conversion aircrew will fly the sorties designated by an “R” and “SC” respectively.

c. Refresher Syllabus. A Refresher syllabus is provided for personnel returning to an operational squadron who have been previously assigned to the Basic POI of the UH-1Y. Experienced aircrew (completed at least one fleet tour in an operational unit) returning to a squadron, who have not flown in an UH-1Y for an extended period of time shall be place in the Refresher POI.

(1) This syllabus is predicated on the experience of the Refresher. Aircrew in the Refresher syllabus should fly all “R” coded events; however, need not fly every event within a stage of training to be requalified in that stage. The commanding officer may tailor the Refresher syllabus to fit the experience of the Refresher per T&R Program Manual. When the “R” coded

events within a stage of training are complete, the aircrew may be credited with the CRP for the entire stage of training. This assumes that the Refresher has had previous proficiency in that stage of training. If the aircrew has no previous proficiency in a stage or particular event, then they should fly the entire stage or all events not previously flown. The Refresher syllabus applies only up to the stage achieved during the prior tour. After that the aircrew will complete the entire remaining syllabus. Prerequisites apply only to replacement aircrew and not to Refresher.

(2) Previously designated UH-1N CC/AO will be assigned to the Refresher POI upon completion of FRS Series Conversion training. After performing event conversion in accordance with paragraph 170, previously designated UH-1N aircrew shall complete all R coded events that are delinquent or incomplete and any other (non R coded) events that are also incomplete. Incomplete events will either be new events, like OAS-272, with no direct comparison to a UH-1N event, or an event with no proficiency date because the aircrew never performed it in the UH-1N or because there is no event conversion defined. Several 200+ events are identified as required events for aircrew to successfully continue the series conversion, post FRS, as a Refresher. These events are not assigned an event conversion code from the November T&R regardless of any similarities that may exist. UH-1N aircrew will have to fly them in the Yankee regardless of the date of a similar event last flown in the November. Automated training management systems will not automatically convert UH-1N sorties for proficiency in the UH-1Y. The training officer will have to manually enter these dates, for each aircrew, before commencing 200+ training in the Refresher POI at the tactical unit.

d. Series Conversion Syllabus. A Series Conversion syllabus is provided for personnel with previous experience in the UH-1N. Aircrew in the Series Conversion syllabus should fly all “SC” coded events. The Series Conversion Syllabus is predicated on the experience of the Series Conversion aircrew and is primarily designed for aircrew who have not been out of the UH-1N for longer than 485 days and is most likely beginning the series conversion within days of the last UH-1N flight. 80% of the series conversion aircrew for the first four years of fleet introduction fall in this category. The commanding officer of the FRS may tailor the Series Conversion syllabus to fit the experience, and proficiency, of the Series Conversion aircrew per T&R Program Manual. For conversion from the UH-1Y to the UH-1N see the UH-1N T&R.

e. Secondary MOS CCs. To alleviate inventory shortages of primary MOS crew chiefs, authority is granted to individual unit commanders to train and designate personnel as secondary MOS 6174 only. The source population is restricted to personnel that are from within the 61xx occupational field. Waivers for other MOSs may be requested via DC AVN (ASM) on a case-by-case basis.

(1) The number of secondary MOS CCs that a unit commander is authorized to designate is limited to the current staffing formula, 1.6 CC x PAA = #CCs, minus primary designated CCs assigned. On-hand primary MOS CCs shall have priority for crewmember orders and hazardous duty incentive pay.

(2) Secondary MOS CCs complete normal NATOPS requirements to include flight physical, physiology, and water survival prior to flight. Consideration should be made for SERE training.

(3) If secondary MOS CCs are already designated AOs they only need to complete Core Skill Introduction phase events not previously completed. Otherwise, the entire phase must be completed.

(4) Prior to designation by the unit commander, the respective FRS instructor or MAG Enlisted NATOPS Standardization Evaluator shall certify the

individual's qualification to ensure MOS standardization. This evaluation shall follow all the same procedures as a primary MOS CC evaluation IAW NATOPS.

6. Qualifications and Designations for Series Conversion Aircrew

a. For the UH-1N aircrew who begins the UH-1Y Series Conversion within 730 days of the last UH-1N flight, the squadron commander may elect to carry forward the following designations from the UH-1N to the UH-1Y once the aircrew achieves Proficiency in all events through OAS 322 (CC) and ASPT 316 (AO) and is designated ANSQ LLL in writing. Aircrew who fall outside this parameter (730 days) will be considered on a case-by-case basis for carried forward designations. The provision assumes that the aircrew completes required series conversion training in a reasonable amount of time according to the POI:

- AGI GAU-16
- AGI GAU-17
- AGI M240
- TERF(I)

b. The following table highlights additional requirements in order to regain status for other qualifications and designations (also refer to Event Matrix and sortie descriptions):

Qual/Desig	Requirement
- RW DACM	DACM-432
- FW DACM	DACM-432
- CQ	CQ 450-451 Proficient
- DACM(I)	DACM Qualified, Designated TERF(I)
- NSSI	ANSQ Proficient, Designated SAR CC
- NSFI	ANSQ Proficient, Designated TERF(I)
- NSI	ANSQ Proficient, Designated AGI, NSI-593
- WTI	Designated NSI

7. Aircrew Evaluation Flights. All Aircrew shall have a NATOPS evaluation form completed upon completion of either CSIX-191 or RQD-601.

8. Instructor Requirements

a. The minimum instructor requirements are listed in the Crew Requirements section of each event.

b. CCUI may complete any flight not requiring an instructor with a CC that is proficient and qualified in that stage of training. CCI must be designated to instruct in a particular stage of training.

c. Instructors are required for any event that requires an NSI, AGI, TERFI or DACMI.

9. Event Completion. Compliance with the written event description is mandatory for syllabus event completion. Times indicated for each event are only recommendations.

10. Sequence. Training should be accomplished by flying events within a stage in sequence and stages in sequence when practical.

11. Definitions

a. Discuss

(1) The instructor shall discuss a procedure or task during the brief, inflight, or de-brief.

(2) The CCUI is responsible for knowledge of the applicable procedures prior to briefing.

b. Demonstrate

(1) The instructor performs the task or crew function.

(2) The CCUI observes and is responsible for the knowledge of the task or crew function prior to the flight.

c. Introduce

(1) At his option, the instructor may perform the task or crew function with an accompanying description, or he may coach the CCUI without demonstration.

(2) The CCUI shall perform the task or crew function with coaching as necessary and is responsible for all applicable knowledge prior to the flight.

d. Review

(1) The instructor observes and grades the CCUI without coaching. An airborne critique of the CCUI's performance is at the option of the instructor.

(2) The CCUI is expected to perform the tasks or crew functions without coaching and be devoid of procedural error at a level acceptable to warrant progress into the next stage of training.

231. CORE SKILL INTRODUCTION PHASE

1. Purpose. To develop a Core Skill Introduction CC/AO. At the completion of this phase the CCUI/AOUI will be designated CC/AO, NATOPS qualified and rate the 6174 MOS as specified in the CSIX-191.

2. General. Completion of this phase meets the requirements for the CCUI/AOUI to be designated a CC/AO. At the discretion of the squadron commanding officer a letter designating the CCUI/AOUI a CC/AO shall be placed in the NATOPS jacket, APR and a tracking code of RQD-601 shall be logged. Proficiency will have been gained in FAM, FORM, TERF, NAV, CAL and SWD. NVDs will be utilized during the FAM, FORM, TERF, NAV and CAL stages.

3. Familiarization (FAM)

a. Purpose. To become familiar with flight characteristics, aircraft systems, limitations, and emergency procedures. Develop proficiency in assisting pilots in all aspects of FAM flight, both day and night.

b. General

(1) At the completion of this stage, the CCUI/AOUI should be able to demonstrate the ability to assist pilots in all aspects of FAM flight, both day and night.

(2) AOUI Requirement: FAM-104, FAM-113.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. UH-1Y aircraft familiarization must be completed prior to flight training.

e. Flight Training. (3 Sorties, 6.0 Hours).

FAM-104 2.0 1 UH-1Y A

Goal. Introduce normal ground and flight procedures.

Requirements

(1) Brief/discuss engine fire on ground and fire in the aircraft on the ground.

(2) Introduce duties of the CC to include preflight, starting, taxi, takeoff, inflight lookout, landing, and postflight procedures.

(3) Demonstrate use of ICS, voice procedures, sighting, using clock systems, and estimating distance.

Performance Standards. Display knowledge of ICS voice procedures, CC duties to include preflight, starting, taxi/takeoff, inflight, landing, all applicable emergency procedures.

Crew. CCI/CCUI or AOUI.

FAM-105 2.0 R,M,SC 1 UH-1Y A

Goal. Introduce communications, passenger procedures, normal and emergency procedures.

Requirements

(1) Brief/discuss takeoff and landing emergencies, fire in flight, smoke elimination, ditching procedures, aircraft engine and transmission limitations.

(2) Introduce the duties of the CC during precautionary/emergency landings, including autorotations.

(3) Introduce communication/navigation equipment and CDNU. Introduce passenger brief, include passenger emergency procedures.

(4) Introduce aircraft weight and balance calculations and CC responsibilities in loading.

Performance Standards. Display knowledge of ICS voice procedures, CC duties to include preflight, starting,

taxi/takeoff, inflight, landing, all applicable emergency procedures.

Prerequisite. FAM-104.

Crew. CCI/CCUI.

FAM-113 2.0 R,M,SC 1 UH-1Y A NS

Goal. Introduce NVD techniques during HLL.

Requirements

(1) Brief/discuss NVD preflight/adjustment/focusing, NVD eye lane, ANV-20-20 Eye Lane System Resolution Test Set use. NVD emergencies/malfunctions, aircraft emergencies while using NVDs, and aircrew coordination.

(2) Introduce the wear and use of NVDs.

Performance Standards. Display ability to perform CC duties using NVDs.

Prerequisite. FAM-105.

Crew. NSFI or NSI/CCUI or AOUI, Night Lab complete.

4. Formation (FORM)

a. Purpose. To become familiar with crew functions and responsibilities required during formation flying.

b. General. AOUI requirements: FORM-131, FORM-133.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (2 Sorties, 4.0 Hours).

FORM-131 2.0 2 UH-1Y A

Goal. Introduce tactical formations.

Requirement

(1) Brief/discuss combat cruise, combat spread, TAC turns, cross turns, split turns, and break turns.

(2) Discuss ordnance delivery patterns.

(3) Introduce CC responsibilities associated with tactical formations and maneuvers.

(4) Review hand and arm signals, lookout procedures, and CC responsibilities associated with formation flying.

Performance Standards. Display thorough knowledge of tactical formation maneuvers. Demonstrate proficiency assisting pilots in tactical formation maneuvers.

Prerequisite. FAM-105.

Crew. CCI/CCUI or AOUI.

FORM-133 2.0 2 UH-1Y A NS

Goal. NVD FORM introduction.

Requirement. Review hand and arm signals, lookout procedures, and CC responsibilities associated with formation flying at night.

Performance Standards. Demonstrate proficiency assisting pilots in night formation maneuvers.

Prerequisite. FAM-113, FORM-131.

Crew. NSFI or NSI/CCUI or AOUI.

5. Terrain Flight (TERF)

a. Purpose. To develop aircrew coordination required during TERF.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilot in TERF.

(2) AOUI requirement: TERF-141, TERF-142.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course

e. Flight Training. (2 Sorties, 4.0 Hours).

TERF-141 2.0 R,SC 1 UH-1Y A

Goal. Introduce TERF techniques.

Requirement

(1) Brief/discuss aircraft clearance and aircraft emergencies during TERF altitudes.

(2) Introduce blade walk, power checks, masking/unmasking, NOE quickstops, bunt, roll, low level, contour, and NOE profiles emphasizing vertical relief of the earth and vegetation.

Performance Standards. Display knowledge and ability to assist pilots in TERF environment.

Prerequisite. FAM-105.

Crew. TERFI/CCUI or AOUI.

TERF-142 2.0 R 1 UH-1Y A NS

Goal. Introduce TERF techniques using NVDs.

Requirement

(1) Brief/discuss NVD considerations in the TERF environment.

(2) Introduce blade walk, power checks, masking/unmasking, NOE quickstops, bunt, roll, low level, contour, and NOE profiles emphasizing vertical relief of the earth and vegetation with NVGs.

Performance Standards. Display knowledge and ability to assist pilots in TERF environment while using NVDs.

Prerequisite. FAM-113, TERF-141.

Crew. NSFI or NSI/CCUI or AOUI.

6. Navigation Flight (NAV)

a. Purpose. To become familiar with crew functions and responsibilities while navigating without use of radio navigational aids.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilots in all phases of inflight navigation.

(2) AOUI requirement: NAV-152.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (2 Sorties, 4.0 Hours).

NAV-151 2.0 2 UH-1Y A

Goal. Introduce aircrew duties during TERF navigation.

Requirement

(1) Review lookout and aircrew coordination required during TERF.

(2) Introduce the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, and map preparation.

Performance Standards. Display ability to assist pilots in TERF navigation.

Prerequisite. TERF-141.

Crew. CCI/CCUI or AOUI.

NAV-152 2.0 2 UH-1Y A NS

Goal. Introduce night navigation on NVDs.

Requirement

(1) Brief/discuss HLL, LLL, effects of moon angle and meteorological effects on NVDs.

(2) Introduce the use of checkpoints, time distance checks, barrier features and prominent terrain features while using NVDs and NVD map preparation.

Performance Standards. Display knowledge and ability to assist pilots in navigation while using NVDs.

Prerequisite. TERF-142, NAV-151.

Crew. NSFI or NSI/CCUI or AOUI.

7. Specific Weapons Delivery (SWD)

a. Purpose. To familiarize the aircrew with the procedures required to provide fire on targets of opportunity.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate knowledge of weapons systems and ordnance delivery with crew served weapons.

(2) AOUI requirements: SSWD-160 and SWD-161.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Simulator Training. (1 Event, 1.5 Hours).

f. Flight Training. (1 Sortie, 2.0 Hours).

SSWD-160 1.5 S

Goal. Introduce weapons and checklist procedures.

Requirement. Introduce ordnance loading, preflight, operations, postflight, safety procedures, weapons conditions and ordnance weapons checklist.

Performance Standards. Display knowledge and ability to safely employ crew served weapons IAW applicable checklists.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. UH-1Y Aerial Gunnery Simulator and Aerial Gunnery Range

Crew. AGI/CCUI or AOUI.

SWD-161 2.0 2 UH-1Y A

Goal. Introduce aerial gunnery training.

Requirement

(1) Discuss attack patterns, section operations, sighting procedures, malfunction/stoppage procedures and WORM formula.

(2) Demonstrate/introduce ordnance loading, preflight, operations, postflight, safety procedures, weapons conditions and ordnance weapons checklist.

(3) Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination and weapons safety.

Performance Standards. Display knowledge and ability to safely employ crew served weapons IAW applicable checklists.

Prerequisite. FORM-131, NAV-151, SSWD-160.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Aerial gunnery range.

Crew. AGI/CCUI or AOUI.

8. Tactics (TAC)

a. Purpose. To demonstrate the ability to tactically employ aircraft weapons systems. All aspects of aircrew coordination shall be thoroughly briefed.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilot in all aspects of CALs.

(2) AOUI requirements: TAC-182, TAC-183.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (4 Sorties, 7.5 Hours).

TAC-181 2.0 1 UH-1Y A

Goal. Introduce confined area landing operations (CALs), to include HIE approaches.

Requirement

(1) Brief/discuss power settling, landing zone brief, dynamic rollover, slope landings and aircrew coordination.

(2) Introduce lookout procedures required to assist the pilot when operating in a confined area, HIE approaches stressing safety procedures, aircraft clearance from obstacles, and terrain suitability.

Performance Standards. Display ability to safely conduct CALs and HIE approaches IAW NATOPS.

Prerequisite. FAM-105.

Crew. CCI/CCUI.

TAC-182 1.5 R,SC 1 UH-1Y A

Goal. Introduce tactical CAL approaches.

Requirement

(1) Brief/discuss threat conditions, tactical approaches and departures. Reference UH-1Y Tactical Manual.

(2) Introduce procedures required to assist the pilot when operating in a low to high threat environment. Stress safety procedures, aircraft clearance from obstacles, and terrain suitability.

Performance Standards. Display ability to safely conduct tactical CALs and HIE approaches IAW NATOPS.

Prerequisite. TAC-181.

Crew. CCI/CCUI or AOUI.

TAC-183 2.0 1 UH-1Y A NS

Goal. Introduce night CALs on NVDs.

Requirement

(1) Brief/discuss brown/white out and the effects of moisture; emphasize aircrew coordination.

(2) Introduce procedures required to assist the pilot when operating in a confined area at night. Stress safety procedures, aircraft clearance from obstacles, terrain suitability, and the use of ground lighting systems.

Performance Standards. Display ability to safely conduct CALs and HIE approaches IAW NATOPS while using NVDs.

Prerequisite. FAM-113, TAC-181.

Crew. NSFI or NSI/CCUI or AOUI.

TAC-184 2.0 1 UH-1Y A

Goal. Introduce external load/hoist procedures.

Requirement

(1) Brief/discuss aircrew coordination, hand and arm signals, ICS terminology, hook/hoist limitations/malfunctions, load release, and emergency procedures.

(2) Brief/discuss the use of Chicago grip, quick splice, and cable cutters.

(3) Introduce
(a) Operational check of hoist/hook.
(b) Use of rescue strop and jungle penetrator.
(c) Cargo hook pendant and manual release.
(d) Emergency procedures for external hook/rescue hoist.
(4) Conduct at least two hook-up, flight and release operations for cargo hook. Two hoisting operations using a suitable weight.

Performance standards. Demonstrate proper ICS terminology, hook/hoist operation and installation.

Prerequisite. TAC-181.

Crew. CCI/CCUI or AOUI.

9. Crew Chief/Aerial Observer Core Skill Introduction Check (CSIX)

a. Purpose. To evaluate proficiency in the performance of Core Skill Introduction CC/AO duties per UH-1Y NATOPS Manuals.

b. General

(1) Completion of this stage meets the requirements for designation as a CC and MOS 6174 or AO. This sortie will serve as the initial NATOPS Evaluation.

(2) AOUI requirements: CSIX-191

c. Crew Requirements. Initial CSIX-191 for CCUI must be conducted by FRS or NATOPS Evaluator. Initial CSIX-191 for AOUI may be conducted by squadron NATOPS Instructor/Assistant NATOPS Instructor.

d. Ground/Academic Training. Open and closed book tests must be successfully completed per appropriate UH-1Y NATOPS Flight Manuals prior to Core Skill Introduction evaluation flight.

e. Flight Training. (1 Sortie, 2.0 Hours).

CSIX-191 2.0 R,M,SC E 1 UH-1Y A

Goal. Core Skill Introduction Check.

Requirement. Conduct a CC/AO NATOPS evaluation per criteria in the UH-1Y NATOPS manuals.

Performance Standards. IAW NATOPS Flight Manual.

Prerequisite. Core Skill Introduction phase complete.

Crew. NE, NI OR ANI/CCUI or AOUI.

232. CORE SKILL BASIC PHASE

1. Purpose. To produce a TERF and NSQ (HLL) qualified CC/AO. The focus of training is combat proficiency.

2. General

a. Upon completion of this phase, the aircrew will be TERF and NSQ (HLL) complete and may conduct additional missions as specified by the squadron commander. After completing TERF-201, a TERF qualification letter signed by the squadron commanding officer shall be placed in the NATOPS with a copy in the APR and a tracking code of QUAL 610 shall be logged.

b. Completion of TERF-201, REC-221, CAL-232, SWD-253, 254, 255 and 256 meets the requirements for the CCUI/AOUI to be Night Systems Qualified (HLL). Completion of all 200-level night systems events meets the requirements for the aircrew to be Night Systems Qualified (HLL). At the discretion of the squadron Commanding Officer a letter assigning the aircrew as NSQ (HLL) qualified shall be placed in the NATOPS jacket and the APR, and a tracking code of QUAL-611 shall be logged.

c. All NS flights in this phase of training shall be flown under HLL conditions.

3. Ground Training. Requirements are listed per stage of flight and must be completed prior to the associated stage of flight. Squadrons may schedule training earlier in phase to allow maximum student participation.

4. Terrain Flight/Navigation (TERF)

a. Purpose

(1) To become proficient with crew functions and responsibilities while navigating without the use of radio navigational aids at TERF altitudes.

(2) To become familiar with CC responsibilities during formation flight in the TERF environment.

b. General. AOUI Requirement: TERF-200, 201.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. Review the appropriate section of the UH-1Y MAWTS-1 Academic Support Package lectures.

e. Flight Training. (2 Sorties, 4.0 Hours).

TERF-200	2.0	2 H-1 A

Goal. Review TERF maneuvers and navigation.

Requirement

(1) Review the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, map preparation, hand and arm signals.

(2) Introduce flight in the low level, contour and NOE profiles.

(3) Flight to be completed in contour/NOE mode.

Performance Standards. Demonstrate the ability to perform and understand TERF navigation.

External Syllabus Support. TERF route.

Crew. TERFI/CCUI or AOUI.

TERF-201 2.0 R E 2 H-1 A NS

Goal. Review TERF navigation while using NVDs.

Requirement

(1) Demonstrate lookout procedures required to assist the pilot when operating in a TERF environment. Stress safety procedures, aircraft clearance from obstacles, and terrain suitability while using NVDs.

(2) Demonstrate the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, and map preparation while using NVDs.

(3) Review use of AVN-20-20 Eye Lane System Resolution Test Set.

Performance Standards. Demonstrate the ability to safely execute TERF navigation while using NVDs.

Prerequisite. TERF-200.

External Syllabus Support. TERF route.

Crew. NSI/CCUI or AOUI.

5. Reconnaissance (REC)

a. Purpose. To develop the ability to use thermal imaging to increase situational awareness, aircrew coordination, and gain familiarity with laser range finding.

b. General

(1) The CCI shall be familiar with the use of the Night Thermal Imaging System (NTIS). The CCUI will safely conduct operational tasks prior to and during NTIS operations.

(2) AOUI requirement: REC-221.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. To be accomplished prior to any flight training in this phase. Review the UH-1Y ANTTP, Chapter 3 (NTIS), MAWTS-1 Laser Safety Lecture.

e. Flight Training. (1 Sortie, 2.0 Hours).

REC-221 2.0 R 2 H-1 A NS

Goal. Familiarize the CCUI and AOUI with terminology, preflight, postflight, switchology and flight operation of NTIS.

Requirement

(1) Discus terminology, Laser Safety procedures and specific aircrew training issues during NTIS operations.

(2) Demonstrate a thorough understanding of the NTIS, its components (TFU, CEU, HCU, VDU, and VCR), NTIS power-up procedures and knowledge of operations.

Performance Standards. Demonstrate basic knowledge and understanding of FLIR/NTIS operations.

Prerequisite. TERF-201.

External Syllabus Support. TERF area, thermally augmented threat vehicles if available.

Crew. NSI/CCUI or AOUI.

6. Confined Area Landings (CAL)

a. Purpose

(1) To develop aircrew coordination when operating in a confined area.

(2) To develop proficiency to conduct operations while using NVDs.

b. General. AOUI requirement: CAL-230, CAL-232.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. NA.

e. Flight Training. (3 Sorties, 6.0 Hours).

CAL-230 2.0 R 2 UH-1Y A

Goal. Introduce section CAL operations and HIE approaches.

Requirement

(1) Review procedures to assist the pilot when operating in a confined area.

(2) Review formation and lookout procedures stressing responsibilities during section operations.

Performance Standards. Demonstrate the ability to assist pilots in operating in a confined area to include proper crew coordination, aircraft clearance, and wingman awareness.

Prerequisite. TERF-201.

Crew. TERFI/CCUI or AOUI.

CAL-231 2.0 2 UH-1Y A NS

Goal. Introduce section CAL operations and HIE approaches while using NVDs.

Requirement

(1) Review procedures to assist the pilot when operating in confined areas with NVDs.

(2) Introduce crew responsibilities relative to section operations while using NVDs.

Performance Standards. Demonstrate the ability to assist pilots during section operations in confined areas and HIE approaches while using NVDs.

Prerequisite. CAL-230.

Crew. NSI/CCUI or AOUI.

CAL-232 2.0 R 2 UH-1Y A NS

Goal. Display proficiency during section CAL operations and HIE approaches while using NVDs.

Requirement

(1) Review procedures to assist the pilot when operating in confined areas with NVDs.

(2) Introduce crew responsibilities relative to section operations while using NVDs.

Performance Standards. Display proficiency during section operations in confined areas and HIE approaches while using NVDS.

Prerequisite. CAL-231.

Crew. NSI/CCUI or AOUI.

7. Field Carrier Landing Practice (FCLP)

a. Purpose. To introduce flight operations from a carrier deck or air capable ship by introducing day and night FCLPs.

b. General. The Aircrew will demonstrate/introduce proper communication procedures, patterns and aviation operations in the shipboard environment. Refer to appropriate NATOPS and LHA/LPH/LHD NATOPS manuals for shipboard operations.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight Event Training. (2 sorties, 2.0 hours).

FCLP-241 1.0 R 1 UH-1Y A

Goal. Introduce day FCLP operations.

Requirement

(1) Discuss air capable ships, shipboard specific crew coordination, LSE signals, emergency and ditching procedures, wind limitation charts, shipboard terminology, patterns, entry/exit procedures, rotor brake start, HERO conditions and shipboard airspace.

(2) Demonstrate/introduce patterns, sight picture and landings to an FCLP deck.

(3) Conduct a rotor brake start and a minimum of 5 FCLP landings.

(4) Review shipboard EPs and patterns.

Performance Standards. Per the UH-1Y NATOPS and shipboard NATOPS manuals.

External Syllabus Support. FCLP pad.

Crew. CCI/CCUI or AOUI.

FCLP-242 1.0 R 1 UH-1Y A NS

Goal. Introduce NVD FCLP operations.

Requirement

(1) Discuss instrument scan, NVD patterns, shipboard crew coordination, comfort level, NVD failures and emergency procedures, lighting considerations, vertigo and shipboard instrument procedures.

(2) Demonstrate/introduce NVD patterns, sight picture and landings to an FCLP deck.

(3) Review communication procedures and visual signals.

(4) Conduct a minimum of 5 NVD landings.

Performance Standards. Per the UH-1Y NATOPS and shipboard NATOPS manuals.

Prerequisites. FCLP-241.

External Syllabus Support. FCLP pad.

Crew. NSI/CCUI/AOUI.

8. Specific Weapons Delivery (SWD)

a. Purpose. To develop proficiency in specific weapons delivery.

b. General

(1) Upon successful completion of this stage the CCUI/AOUI will be able to demonstrate knowledge of weapons systems and proficiency in BCWD with crew served weapons. Each flight in this stage will be completed with appropriate documentation to include ATFs with round counts.

(2) AOUI Requirements. SWD-251 thru SWD-256.

(3) Section operations should be used if available.

(4) Weapon mounted lasers should be used for all NVD flights.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review MAWTS-1 Academic Support Package lectures, Aerial Gunnery Manual and applicable weapons checklist. Prior to commencing each flight, the CCUI/AOUI shall receive appropriate ground training by an aerial gunnery instructor/Night Systems Instructor for the respective weapon and laser usage.

e. Flight Training. (6 Sorties, 12.0 Hours).

SWD-251 2.0 2 H-1 A

Goal. Introduce GAU-16, .50 caliber machine gun.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons while stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the GAU-16.

Prerequisite. TERF-201.

Ordnance. 300 rds .50 cal GAU-16.

External Syllabus Support. Aerial gunnery range.

Crew. AGI/CCUI or AOUI.

SWD-252 2.0 2 H-1 A

Goal. Introduce GAU-17.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons while stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the GAU-17.

Prerequisite. TERF-201.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. Aerial gunnery range.

Crew. AGI/CCUI or AOUI.

SWD-253 2.0 2 H-1 A

Goal. Introduce M-240.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the M-240.

Prerequisite. TERF-201.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. Aerial gunnery range.

Crew. AGI/CCUI or AOUI.

SWD-254 2.0 R 2 H-1 A NS

Goal. Introduce GAU-16 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-16 while using NVDs.

Prerequisite. SWD-251.

Ordnance. 300 rds .50 cal GAU-16.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

SWD-255 2.0 R 2 H-1 A NS

Goal. Introduce GAU-17 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-17 while using NVDs.

Prerequisite. SWD-252.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

SWD-256 2.0 R 2 H-1 A NS

Goal. Introduce M-240 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the M-240 while using NVDs.

Prerequisite. SWD-253.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

9. Escort (ESC)

a. Purpose. To develop proficiency in CC and SWD duties during heliborne and surface escort formations and maneuvers.

b. General

(1) Aircrew will develop a working knowledge of escort formations, maneuvers, and responsibilities associated with heliborne and surface force operations. Ordnance is optional for this stage of training. If ordnance is utilized the aircrew shall have completed the SWD flight corresponding to the ordnance load.

(2) AOUI Requirements: ESC-263.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Ordnance. Ordnance is optional for this stage of training.

f. Flight Training. (2 Sortie, 4.0 Hours).

ESC-262 2.0 R 2 H-1 A NS

Goal. Demonstrate and introduce night helicopter escort using NVDs.

Requirement

(1) Discuss escort flight aircrew responsibilities.

(2) Introduce basic escort principles, formations, techniques and responsibilities per tactical doctrine for helicopters and surface vehicles.

(3) Brief and review lookout doctrine and sectors of fire.

Performance Standards. Demonstrate the ability to safely and effectively employ crew served weapons while operating as escort aircraft.

Prerequisite. SWD-254, SWD-255 or SWD-256 based on configuration.

Ordnance. 1500 rds 7.62 mm GAU-17, 300 rounds .50 Cal GAU-16, 400 rds 7.62 mm M-240.

External Syllabus Support. One or more assault aircraft and a live fire and LASER safe range (if required).

Crew. NSI/CCUI or AOUI.

ESC-263 2.0 R 2 H-1 A (NS)

Goal. Introduce surface force escort operations.

Requirement

(1) Discuss escort flight aircrew responsibilities.

(2) Introduce basic escort principles, formations, techniques and responsibilities per tactical doctrine for helicopters and surface vehicles.

(3) Brief and review lookout doctrine and sectors of fire.

Performance Standards. Demonstrate the ability to safely and effectively employ crew served weapons while operating as escort aircraft.

Prerequisite. CAL-231. CAL-233 If flown at night. Flown with ordnance, one of the following: SWD-254, SWD-256, or SWD-257 depending on which weapons are used.

Ordnance. 1500 rds 7.62 mm GAU-17, 300 rounds .50 Cal GAU-16, 400 rds 7.62 mm M-240.

External Syllabus Support. Two or more assault helicopters, aerial gunnery range.

Crew. AGI (NSI)/CCUI or AOUI.

10. Offensive Air Support (OAS)

a. Purpose. To develop proficiency in OAS under varying threat

conditions.

b. General

(1) The CCUI/AOUI will display proficiency in RW CAS in support of a ground unit.

(2) AOUI requirement: OAS-273.

c. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

d. Crew Requirement. As listed at the end of each event.

e. Flight Training. (2 Sortie, 4.0 Hours).

OAS-272 2.0 R 2 H-1 A/S (NS)

Goal. Introduce RW CAS to ground forces in an urban environment.

Requirement

(1) Discuss aircraft flight profiles, weapon selection and ROE.

(2) Introduce attack profiles and proper communication procedures associated with weapons employment.

(3) Conduct urban navigation using non-standard maps and/or gridded reference graphic (if available).

Performance Standards. Display ability to perform aircrew responsibilities in a tactical urban environment.

Prerequisite. SWD 251-253 and (254-256). Based on configuration.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

OAS-273 2.0 R E 2 H-1 A NS

Goal. To provide RW CAS to ground forces at night.

Requirement

(1) Discuss aircraft flight profiles, weapon selection and ROE.

(2) Discuss night/IR marking methods, employment capabilities of the NTIS, sensor management , terminal control procedures at night and CRM during night RW CAS missions.

(3) Display understanding of attack profiles and proper communication procedures associated with weapons employment.

(4) Conduct urban navigation using non-standard maps and/or gridded reference graphic (if available).

Performance Standards. Display ability to perform aircrew responsibilities in a tactical environment.

Prerequisite. OAS 272, SWD-254 thru 256. Based on configuration.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

233. CORE SKILL ADVANCED PHASE

1. Purpose. To produce a Core Skill Advanced CC/AO. Upon completion of the Core Skill Advanced Phase, aircrew shall be proficient in all core skills.

2. General. Completion of ANSQ-306 meets the requirement for the CCUI/AOUI to be NSQ (LLL) qualified. At the discretion of the squadron commanding officer a letter assigning the aircrew as NSQ LLL qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-612 shall be logged.

3. Ground Training. Ground training requirements are listed per stage and must be completed prior to beginning that stage of training. Squadrons may schedule training earlier in the stage to allow maximum student participation.

4. Advanced Night Systems Qualification (ANSQ)

a. Purpose. To develop proficiency during LLL operations.

b. General

(1) Completion of ANSQ-306 meets the requirement for the CCUI/AOUI to be Night Systems Qualified (LLL). AOUI may be qualified in writing NSQ LLL by the squadron commander and may complete the remaining Core Skill Advanced NVD training under any light level condition. Upon completion of ANSQ 303 per aviation T&R program manual the aircrew will be qualified to carry troops under LLL conditions.

(2) AOUI requirement: ANSQ-301 thru 306.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

d. Flight Training. (6 Sorties, 12.0 Hours).

ANSQ-301 2.0 1 UH-1Y A NS

Goal. Develop proficiency in CALs while using NVDs during LLL conditions.

Requirement

(1) Brief/discuss comfort levels, NVG map preparation and aircrew coordination.

(2) Conduct low work and navigation skills while using NVDs during LLL.

Performance Standards. Display proficiency during confined area operations and HIE approaches while using NVDs under LLL conditions.

Prerequisite. NSQ HLL.

Crew. NSI/CCUI or AOUI.

ANSQ-302 2.0 2 UH-1Y A NS

Goal. Introduce proficiency in tactical formation flight and TERF navigation during LLL conditions.

Requirement. Aircrew will develop proficiency in the TERF environment in low level, contour and NOE flight.

Performance Standards. Display proficiency in all aspects of CAL and TERF navigation under LLL conditions.

Prerequisite. ANSQ-301.

Crew. NSI/CCUI or AOUI.

ANSQ-303 2.0 R 2 UH-1Y A NS

Goal. Introduce night section tactical helicopter operations using NVGs under LLL.

Requirement. Conduct a tactical assault support mission in a low to medium threat environment. Aircrew will refine aircrew coordination skills and lookout doctrine.

Performance Standards. Display ability to conduct a tactical assault support mission in a low to medium threat environment under LLL conditions.

Prerequisite. ANSQ-302.

External Syllabus Support. One or more assault helicopters.

Crew. NSI/CCUI or AOUI.

ANSQ-304 2.0 R 2 H-1 A NS

Goal. Introduce GAU-16 gunnery under LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on crew served weapons employment, weapons conditions, malfunctions, weapons preflight and armimg/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-16 while using NVDs under LLL conditions.

Prerequisite. SWD-254, ANSQ-302.

Ordnance. 300 rds .50 Cal GAU-16.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

ANSQ-305 2.0 R 2 H-1 A NS

Goal. Introduce GAU-17 gunnery under LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on crew served weapons employment, weapons conditions, malfunctions, weapons preflight and armimg/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-17 while using NVDs under LLL conditions.

Prerequisite. SWD-255, ANSQ-302.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

ANSQ-306 2.0 R E 2 H-1 A NS

Goal. Introduce M-240 gunnery under low LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on aircrew coordination, crew served weapons employment, weapons conditions, malfunctions, weapons preflight and armimg/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the M-240 while using NVDs under LLL conditions.

Prerequisite. SWD-256, ANSQ-302.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

5. Assault Support Operations (ASPT)

a. Purpose. To develop the ability to perform fastrope, insert/extract, TRAP and NVD escort operations.

b. General

(1) Upon completion of each ASPT mission the aircrew will be considered capable of performing that particular mission.

(2) AOUI requirement: ASPT-313 and ASPT-316.

c. Ground/Academic Training. Review the applicable MAWTS-1 Courseware and the corresponding chapter(s) of the UH-1Y ANTTP/NATIP.

d. Crew Requirement. As listed at the end of each event.

e. Flight Training. (6 Sorties, 12.0 Hours).

ASPT-310 2.0 1 UH-1Y A

Goal. Develop proficiency in fastrope/rappel operations.

Requirement. Brief and discuss aircraft rigging, insert techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in fastrope/rappel operations. IAW UH-1Y ANTTP/NATIP, HIE Manual and local orders.

Prerequisite. CAL-230.

External Syllabus Support. HRST Master, ropers.

Crew. CCI/CCUI.

ASPT-311 2.0 R 1 UH-1Y A NS

Goal. Introduce techniques for fastrope/rappel operations at night.

Requirement. Brief and discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies. Complete three insertions of at least two ropers.

Performance Standards. Perform HIE maneuvers IAW UH-1Y ANTTP/NATIP.

Prerequisite. CAL-232, ASPT-310, (ANSQ-306 if LLL).

External Syllabus Support. HRST Master and two ropers.

Crew. NSI/CCUI.

ASPT-313 2.0 2 UH-1Y A (NS)

Goal. Tactically employ UH-1Y for utility support ISO ground forces in an urban environment during day or NVD conditions.

Requirement

(1) Discuss aircraft flight profiles, weapon selection, ROE, Urban Grid Target System, IR CAS procedures, escort and urban heliborne assault considerations.

(2) Assist pilots in conducting urban navigation using non-standard maps (if available). Emphasize optimal use of aircraft systems in the conduct of a MOUT mission.

Performance Standards. CCUI/AOUI will assist pilot in remaining oriented within 1 city block for navigation IAW the UH-1Y ANTTP/NATIP.
Prerequisites. CAL 232, (ANSQ 306 if LLL).

Ordnance. (Optional) Configuration should reflect appropriate mission profiles. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. As required based on availability and local directives.

Crew. (NSI)/CCUI/AOUI(AGUI).

ASPT-314 2.0 R 2 UH-1Y A NS

Goal. Tactically assist pilots in employing UH-1Y for utility support ISO troops in contact insert/extract mission at night.

Requirement. Conduct a heliborne assault in a nonpermissive and MINCOM environment.

Performance Standards. CCUI shall assist pilots during a troops in contact insert/extract mission at night IAW the UH-1Y ANTTP/NATIP.

Prerequisite. CAL-232, OAS-272.

Ordnance. Optional. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. Embarked troops.

Crew. NSI/CCUI.

ASPT-315 2.0 2 H-1 A (NS)

Goal. Conduct Tactical Recovery of Aircraft and

Personnel(TRAP) mission.

Requirement

(1) Brief/discuss aircrew coordination, comfort levels, situational awareness during a TRAP mission.

(2) Discuss ISOPREP and authentication procedures for downed survivor.

(3) Discuss threat zones and RW TACSOP TRAP matrix.

Performance Standards. CCUI shall assist pilots in performing a TRAP mission IAW the UH-1Y ANTTP/NATIP.

Prerequisite. CAL-230, (CAL-232).

Ordnance. Optional. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. Downed aircrew.

Crew. (NSI)/CCUI.

ASPT-316 2.0 R 2 H-1 A NS

Goal. Refine night tactical helicopter escort during LLL conditions.

Requirement

(1) Discuss TACSOP enroute threat reaction requirements, LLL escort techniques, principles and LLL LZ clearance/coverage techniques and procedures.

(2) Review a tactical assault support mission in a low to medium threat environment and fire support planning/integration of supporting arms ISO assault support operations.

(3) Conduct escort of assault support aircraft with at least 25 NM of attached flight. Conduct clearance of LZ for assault ingress. Utilize IR pointer to assist alerting crews to a simulated enemy position in the objective area.

Performance Standards. IAW UH-1Y ANTTP/NATIP.

Prerequisites. ESC-262.

Ordnance. Optional. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240, (40) chaff, (20) flares.

External Syllabus Support. 2 or more assault helicopters.

Crew. NSI/CCUI/AOUI.

6. Offensive Air Support (OAS)

a. Purpose. To develop the procedures and skill to tactically employ the aircraft during OAS missions.

b. General. Upon completion of this stage the aircrew will be proficient in the planning and execution aspects of OAS missions. In addition, the aircrew will be proficient in the operation and employment of all organic weapon systems. Aircrew shall be 200 level complete prior to stage initiation.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight Training. (1 sorties, 2.0 hours).

OAS-322 2.0 R 2 H-1 A (NS)

Goal. Provide CAS to ground forces.

Requirement

(1) Introduce integration of FW CAS assets into objective area mechanics.

(2) Review integration of attack helicopters into the ground scheme of maneuver and fire support coordination measures.

(3) Conduct CAS in a low to medium threat environment.

(4) Display knowledge of Evasive Plan of Action (EPA) in support of the OAS mission.

Performance Standards. Demonstrate the ability to safely and effectively employ crew served weapons while operating in a tactical environment.

Prerequisites. OAS-273, (ANSQ-306 if LLL).

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240.

External Syllabus Support. Live fire range and LASER safe range.

Crew. (NSI)AGI/CCUI.

7. Forward Air Controller (Airborne) [FAC(A)]

a. Purpose. To familiarize the aircrew with responsibilities and communication required to assist pilots while conducting FAC(A).

b. General

(1) At the completion of this stage, the CCUI/AOUI will have an increased knowledge of JCAS and FAC(A) procedures used to control FW aircraft and supporting arms under varied environmental and threat conditions.

(2) AOUI requirements FACA-332 and 333.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sorties, 4.0 hours).

FACA-332 2.0 R 2 H-1 A

Goal. Introduce control of FW aircraft.

Requirement. UH-1Y with operable NTIS.

(1) Discuss FW aircraft ordnance capabilities and limitations, crew coordination, pilot task shedding and task sharing in the FAC(A) arena.

(2) Introduce integration of FW CAS assets into objective area mechanics and communication and control procedures.

Performance Standards. Display proper crew coordination and ability to assist with FAC(A).

Prerequisites. SWD-251 thru 253. Based on configuration.

Ordnance. 300 rds .50 Cal (GAU-16), 1500 rds 7.62 mm (GAU-17), 400 rds 7.62 mm M240).

External Syllabus Support. 2 FW CAS aircraft with ordnance, live fire range and LASER safe range.

Crew. AGI/CCUI/AOUI.

FACA-333 2.0 R 2 H-1 A NS

Goal. Introduce aircrew responsibilities and communication associated with control of FW aircraft at night.

Requirement. UH-1Y with operable NTIS.

(1) Discuss FW aircraft sensor capabilities and limitations.

(2) Discuss integration of FW CAS assets into objective area mechanics, communication and control procedures, crew coordination, pilot task shedding and task sharing in the FAC(A) arena.

Performance Standards. Display proper crew coordination and ability to assist with FAC(A).

Prerequisites. SWD-254 thru 256. Based on configuration.

Ordnance. 300 rds .50 Cal (GAU-16), 1500 rds 7.62 mm (GAU-17), 400 rds 7.62 mm M240).

External Syllabus Support. 2 FW CAS aircraft with ordnance, live fire range and LASER safe range.

Crew. NSI/CCUI/AOUI.

234. CORE SKILL PLUS PHASE

1. Purpose. To certify the CCUI and AOUI in large scale integrated mission events; events having unique mission taskings; events having a low probability of execution in combat, or high-risk events.

2. General

a. Completion of the RWDACM stage meets the requirements for the CCUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-614 shall be logged.

b. Completion of the FWDACM stage meets the requirements for the CCUI to be FWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as FWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-615 shall be logged.

c. Completion of CQ-451 meets the requirement for the CCUI to be CQ qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as CQ qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-616 shall be logged.

3. Assault Support (ASPT)

a. Purpose. To develop the ability to perform HIE operations.

b. General

(1) Upon completion of each of event the aircrew will be considered capable of performing that particular mission. Prior to conducting HIE a face-to-face brief with the Fastrope/Rappel/Spie/Jump Master is required.

(2) AOUI requirement: ASPT-404.

c. Crew Requirement. As listed at the end of each event. If passengers are embarked, aircrew must be NSQ.

d. Ground/Academic Training. Review the applicable MAWTS-1 Courseware and corresponding chapter of the UH-1Y ANTTP/NATIP.

e. Flight Training. (5 Sorties, 7.5 Hours).

ASPT-400 1.0 1 UH-1Y A (NS)

Goal. Introduce techniques for paradrop operations.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies. CCUI shall conduct paradrops with at least two jumpers.

Performance Standards. Display proper crew coordination and ability to assist in paradrop operations.

Prerequisite. CAL-232 HLL, (ANSQ-303 LLL).

External Syllabus Support. Jump Master.

Crew. (NSI) CCI /CCUI.

ASPT-401 1.5 1 UH-1Y A

Goal. Introduce techniques for water insertions.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in water insertion operations.

Prerequisite. TERF-201.

External Syllabus Support. HRST Master.

Crew. CCI/CCUI.

ASPT-402 1.5 R 1 UH-1Y A

Goal. Introduce techniques for insertion/extraction using the Special Personnel Insertion/Extraction (SPIE) rig or Jacob's Ladder.

Requirement. Brief/discuss aircraft rigging, insertion/extraction techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in SPIE or Jacob's Ladder operations.
Prerequisite. TERF-201.

External Syllabus Support. HRST Master.

Crew. CCI/CCUI.

ASPT-404 2.0 R 1 UH-1Y A (NS)

Goal. Introduce Mountain Area Landings (MALs).

Requirement. Brief and discuss high altitude operations, loss of tail rotor effectiveness, turbulence, orographic lifting, and downdrafts.

Performance Standards. Perform 5 mountain area landings and 2 simulated HIE approaches in a mountain environment.

Prerequisite. CAL-230 (CAL-232 HLL, ANSQ-301 LLL).

Crew. (NSI)TERFI/CCUI/AOUI.

ASPT-405 1.5 R 1 UH-1Y A

Goal. Introduce techniques for emergency rescue hoist/external loads procedures.

Requirement

(1) Brief and discuss engine failures, tail rotor emergencies, settling with power, aircraft rigging, hoist capabilities,

aircrew coordination, HST procedures and operation, ground crew brief, emergencies, and load jettison.

(2) Demonstrate/introduce proper techniques for hoist pickup.

(3) Complete three iterations of hoist procedures (pick-up, hoist, recovery).

Performance Standards. Conduct flight and hoist procedures IAW the UH-1Y ANTTP/NATIP, and local directives.

Prerequisite. TERF-201 CAL-230.

External Syllabus Support. Appropriate external weight.

Crew. TERFI/CCUI.

4. Offensive Air Support (OAS)

a. Purpose. To refine proficiency in OAS missions.

b. General

(1) At the completion of this stage, the CCUI will have demonstrated the ability to assist in the integration of FW and RW aircraft in the execution of OAS missions under varied environmental and threat conditions.

(2) AOUI requirement: OAS-416, OAS-417.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight Training. (2 sorties, 4.0 hours).

OAS-416 2.0 2 H-1 A

Goal. Conduct OAS in an urban environment.

Requirement

(1) Discuss aircraft flight profiles, weapon selection and ROE.

(2) Discuss considerations for detailed fire support plan with ground force integration. Emphasize detailed coordination/planning for urban OAS, fire support coordination, GCE scheme of maneuver, targeting and marking considerations.

(3) Assist in the conduct of urban targeting using some type of gridded reference graphic (GRG).

Performance Standards. CCUI/AOUI will assist the pilot in remaining oriented within 1 city block for navigation. Correctly identify target based on GRG talk-on.

Prerequisites. OAS-272.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240.

External Syllabus Support. 1 FAC qualified ground controller with appropriate marking devices (if available), suitable urban environment or MOUT facility.

Crew. AGI/CCUI/AOUI.

OAS-417 2.0 R 2 H-1 A NS

Goal. Conduct OAS in an urban environment at night.

Requirement

(1) Discuss aircraft flight profiles, weapon selection, ROE, Urban Grid Target System, IR CAS procedures, escort and urban heliborne assault considerations.

(2) Assist in the conduct of targeting using some type of gridded reference graphic (GRG). Emphasize optimal use of aircraft systems in the conduct of a MOUT mission.

Performance Standards. CCUI/AOUI will assist pilot to remain oriented within 1 city block for navigation. Correctly identify target based on GRG talk-on.

Prerequisites. OAS-416.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240.

External Syllabus Support. 1 FAC qualified ground controller with appropriate marking devices (if available), suitable urban environment or MOUT facility.

Crew. NSI/CCUI/AOUI.

5. Rotary Wing Defensive Air Combat Maneuvering (RWDACM)

a. Purpose. To develop aircrew responsibility, coordination and situational awareness required during defensive air combat maneuvering against RW aircraft.

b. General

(1) The CCUI and AOUI will develop crew responsibilities in assisting the pilots in accomplishing defensive air combat maneuvers. Once complete with DACM-432 the CC/AO may be qualified in writing RWDACM by the squadron commander. Until a CC/AO door gunner simulator linked to the UH-1Y simulator is available for training, DACM-430 is not required for RWDACM stage completion.

(2) AOUI requirements: Same as CCUI.

(3) CCUI and AOUI must complete and log with a tracking ATF the RQD-614 will be logged with the DACM-432 to be RWDACM Qualified.

c. Crew Requirement. As listed at the end of each event.

d. Ground Training. IAW the MAWTS-1 Course Catalog.

e. Flight Training. (3 Sorties, 5.5 Hours).

DACM-430 1.5 R 2 UH-1Y A

Goal. Introduce air-to-air gunnery.

Requirement

(1) Discuss weapon systems, lead distance, angles and air-to-air gunnery techniques.

(2) Introduce ordnance delivery in a variety of aspect angles versus moving targets.

Performance Standards. IAW UH-1Y ANTTP/NATIP.

Prerequisite. TERF-201, SWD-251 thru SWD-253. Based on configuration.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M-240.

External Syllabus Support. High bird for shadow gunnery, Towed dart/ banner, shadow target, Moving Land Target, or Stationary Land Target, live fire range.

Crew. AGI/CCUI/AOUI.

DACM-431 2.0 1 UH-1Y A

Goal. Perform 1 v 1 RWDACM.

Requirement

(1) Introduce basic defensive maneuvers, lookout procedures and identification of aircraft, missiles and AAA threats.

(2) Brief/discuss aircrew coordination, situational awareness and the use of crew served weapons against known threats.

Performance Standards. CCUI/AOUI will display proper reactions to RW threat attacks.

Prerequisite. TERF-201.

External Syllabus Support. One adversary helicopter, dissimilar if available.

Crew. DACMI/CCUI/AOUI.

DACM-432 2.0 R E 2 H-1 A

Goal. Perform 2 v 1 RWDACM maneuvering.

Requirement

(1) Introduce basic defensive maneuvers, lookout procedures and identification of aircraft, missiles and AAA threats.

(2) Brief/discuss aircrew coordination, situational awareness and the use of crew served weapons against known threats.

Performance Standards. CCUI/AOUI will display proper reactions to RW threat attacks.

Prerequisites. DACM-431.

External Syllabus Support. One adversary helicopter, dissimilar if available.

Crew. DACMI/CCUI/AOUI.

6. Fixed Wing Defensive Air Combat Maneuvers (FWDACM)

a. Purpose. Demonstrate and introduce FWDACM in order to counter enemy offensive air capabilities.

b. General

(1) The CCUI/AOUI will develop crew responsibilities in assisting the pilots in accomplishing defensive maneuvers. Completion of DACM-435 meets the requirements for designation as DACM Qualified. A qualification letter shall be placed in the NATOPS with a copy in the APR and a flight logbook entry and a tracking code of QUAL-615 shall be logged.

(2) AOUI requirements: Same as CCUI.

(3) Upon completion of DACM-435 , CCUI and AOUI will be qualified in all aspects of DACM.

c. Crew Requirements. As listed at the end of each event.

d. Ground Training. IAW the MAWTS-1 Course Catalog.
e. Flight Training. (2 Sorties, 4.0 Hours).

DACM-434 2.0 R 1 UH-1Y A

Goal. Perform 1 v 1 FWDACM maneuvering.

Requirement

(1) Review lookout procedures and identification of aircraft, missiles and AAA threat.

(2) Introduce section DM against airborne FW threats.

(3) Brief/discuss aircrew coordination, situational awareness and crew served weapons against known threats.

Performance Standards. CCUI/AOUI will display proper reactions to RW threat attacks.

Prerequisite. TERF-201.

External Syllabus Support. One adversary FW aircraft.

Crew. DACMI/CCUI/AOUI.

DACM-435 2.0 R E 2 H-1 A

Goal. Perform 2 v 2 FWDACM.

Requirement

(1) Review lookout procedures and identification of aircraft, missiles and AAA threat.

(2) Introduce section DM against airborne FW threats.

(3) Brief/discuss aircrew coordination, situational awareness and crew served weapons against known threats.

Performance Standards. CCUI/AOUI will display proper reactions to RW threat attacks.

Prerequisite. DACM-434.

External Syllabus Support. One FW adversary.

Crew. DACMI/CCUI/AOUI.

7. Nuclear, Biological, and Chemical Warfare (NBC)

a. Purpose. Introduce the aircrew to operations while wearing the aviator's NBC protective mask (AR-5).

b. General. This event is designed to expand the capabilities of the aircrew in NBC operations.

(1) For the safe execution of initial NBC flights, one pilot and one aircrewman shall remain unmasked. On subsequent flights, all aircrew may remain masked.

(2) AOUI requirement: NBC-440.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. Review appropriate section of UH-1Y ANTTP/NATIP for information on the aviator's NBC protective mask prior to flight. The pilot will complete AR-5 familiarization lecture and aircraft egress with mask. Discuss capabilities and disadvantages of NBC protective mask, to include AR-5 emergency procedures. Review all MOPP conditions.

e. Flight Training. (1 Sortie, 1.0 Hours).

NBC-440 1.0 R 1 UH-1Y A

Goal. Conduct normal and tactical flight operations in a NBC environment.

Requirement. Conduct low work, pattern work, CALs, and autorotations. The CCUI/AOUI shall wear the protective mask for the duration of the flight.

Performance Standards. Demonstrate the ability to perform aircrew responsibilities in the NBC environment.

Prerequisite. CAL-230, If flown at night CAL-233.

Crew. (NSI)CCI/CCUI or AOUI.

8. Carrier Qualification (CQ)

a. Purpose. To introduce and develop the aircrew coordination required for flight operations from a carrier deck or air capable ship day and night.

b. General. IAW applicable directives, Instructor will emphasize proper communication procedures, patterns, and aviation operations in the shipboard environment. Refer to appropriate NATOPS and shipboard NATOPS manuals for carrier operations. CCUI/AOUI shall complete the FCLP stage prior to commencing this stage.

(1) At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as CQ qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-616 shall be logged.

(2) Minimum of 5 landings for each CQ.

c. Ground/Academic Training. Review required equipment for shipboard/over-water operations.

d. Crew Requirement. As listed at the end of each event.

e. Flight Training. (2 Sorties, 2.0 Hours).

CQ-450 1.0 R 1 UH-1Y A

Goal. Introduce day shipboard operations.

Requirement

(1) Discuss lost communication procedures and emergency procedures as related to shipboard environment.

(2) Introduce day shipboard operations.

(3) Review procedures to assist pilot with shipboard instrument procedures and Alpha, Charlie, and Delta patterns.

(4) Conduct a minimum of 5 day shipboard landings. Conduct shipboard refueling, if available.

Performance Standards. IAW the UH-1Y NATOPS and shipboard NATOPS manuals.

Prerequisites. FCLP-241, IAW OPNAVINST 3710.7.

External Syllabus Support. Landing platform afloat.

Crew. CCI/CCUI/AOUI.

CQ-451 1.0 R E 1 UH-1Y A N*/NS

Goal. Introduce NVD shipboard operations.

Requirement

(1) Discuss ship airspace and shipboard ordnance operations.

(2) Review shipboard instrument procedures and Alpha, Charlie, Delta patterns.

(3) Introduce NVD shipboard operations.

(4) Conduct a minimum of 5 NVD shipboard landings. Conduct shipboard refueling, if available.

Performance Standards. IAW the UH-1Y NATOPS and shipboard NATOPS manuals.

Prerequisites. FCLP-242, CQ-450, IAW OPNAVINST 3710.7.

External Syllabus Support. Landing platform afloat.

Crew. NSI/CCUI/AOUI.

External Syllabus Support. NVD compatible landing platform afloat.

240. INSTRUCTOR TRAINING

1. Purpose. To develop standardized FRS instructor CCs with the ability to teach flight skills requisite to qualification as a Core Skill Introduction CC.

2. General. Upon completion of the Crew Chief Instructor (CCI) stage, the IUT may be designated a CCI by the FRS squadron commanding officer. A letter designating the CC as a CCI shall be placed in the NATOPS jacket, APR and a tracking code of IDSG-680 shall be logged. The CCIUT must be a TERFI, AGI, and NSQ (LLL) prior to beginning CCIUT training.

3. CCI

a. Ground Training. CCIUT stage lecture.

b. Flight Training. (2 Sorties, 4.0 Hours).

CCI-500 2.0 E 1 UH-1Y A

Goal. CCI will demonstrate techniques of instructing/evaluating normal ground procedures, passenger, and inflight procedures for the Core Skill Introduction phase of training.

Requirement

(1) Demonstrate standard NATOPS procedures to include hand and arm signals.

(2) Emphasize aircrew coordination and comfort level.

Performance Standards. Demonstrate instructional techniques to instruct CCUIs in the Core Skill Introduction phase.

Prerequisite. AGI.

Crew. CCI/CCUI.

CCI-504 2.0 E 1 UH-1Y A

Goal. Demonstrate techniques of instructing/evaluating external weight and hoist operations and procedures.

Requirement

(1) Brief/discuss aircrew coordination, lost communication, ICS terminology, lookout doctrine, emergency procedures, load oscillation, and load release.

(2) Instruct at least two hookups, flight, and release operations.

(3) Instruct procedures, signals, and communications for hoist procedures.

Performance Standards. Demonstrate instructional techniques to CCUIs during external weight and hoisting procedures.

Prerequisite. CCI-500.

Crew. CCI/CCUI.

241. GRADUATE LEVEL COURSES

1. General. There are seven graduate level courses that qualify instructors for specific portions of the T&R syllabus. These courses are as follows:

2. Aerial Gunnery Instructor (AGI)

a. Purpose. To certify the IUT as an Aerial Gunnery Instructor (AGI) capable of safely conducting academic, ground and airborne instruction in the employment of crew served weapons in all aspects of tactical flight.

b. General. IUT will be designated, current and proficient as an Aerial Gunner (AG). IUT will be designated a TERFI prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (10 sorties. 3 per weapon systems plus 1 moving land target).

AGI-540 2.0 1 UH-1Y A

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240.

AGI-541 2.0 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (300) .50 Cal GAU-16.

AGI-542 2.0 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (300) .50 Cal GAU-16.

AGI-543 2.0 R E 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (300) .50 Cal GAU-16.

AGI-544 2.0 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (1500) 7.62 mm GAU-17.

AGI-545 2.0 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (1500) 7.62 mm GAU-17.

AGI-546 2.0 R E 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (1500) 7.62 mm GAU-17.

AGI-547 2.0 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (400) 7.62 mm M240.

AGI-548 2.0 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (400) 7.62 mm M240.

AGI-549 2.0 R E 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the AGI POI.

Ordnance. (400) 7.62 mm M240.

3. Night Systems SAR Instructor (NSSI)

a. Purpose. To certify the IUT as an NSSI capable of safely conducting ground and airborne instruction of SAR missions.

b. General. IUT will be Night Systems Qualified (NSQ) and proficient IAW MCO 3500.14 and 3500.49 prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (3 sorties, 4.0 hours).

NSSI-550	1.0		1 UH-1Y A NS
	Requirement. Reference the MAWTS-1 Course Catalog for the NSSI POI.		
NSSI-551	1.0		1 UH-1Y A NS
	Requirement. Reference the MAWTS-1 Course Catalog for the NSSI POI.		
NSSI-552	2.0	R E	1 UH-1Y A NS
	Requirement. Reference the MAWTS-1 Course Catalog for the NSSI POI.		

4. Night Systems Familiarization Instructor (NSFI)

a. Purpose. To certify the IUT as an NSFI capable of safely conducting ground and airborne instruction of night vision device (NVD) flight during the core skill introduction flight phase.

b. General. IUT will be Night Systems Qualified (NSQ) IAW NAVMC DIR 3500.14 and P3500.49 and designated a TERF(I) prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 Sorties, 3.0 hours).

NSFI-560	1.0		1 UH-1Y A NS
	Requirement. Reference the MAWTS-1 Course Catalog for the NSFI POI.		
NSFI-561	2.0	R E	1 UH-1Y A NS
	Requirement. Reference the MAWTS-1 Course Catalog for the NSFI POI.		

5. Terrain Flight Instructor (TERFI)

a. Purpose. To certify the IUT as an TERFI capable of safely conducting ground and airborne instruction of the UH-1Y terrain flight syllabus.

b. General. IUT will be Core Skills Advanced complete and designated an Aerial Gunner (AG) prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 sortie, 4.0 hours).

TERFI-570	2.0	R E	UH-1Y A
	Requirement. Reference the MAWTS-1 Course Catalog for the TERFI POI.		

TERFI-571 2.0 R E 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the TERFI POI.

6. Defensive Air Combat Maneuvering Instructor (DACMI)

a. Purpose. To certify the IUT as an DACMI capable of safely conducting ground and airborne instruction of the UH-1Y air-to-air flight syllabus.

b. General. IUT will be DACM qualified IAW NAV MC DIR 3500.14 and P3500.49.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 sorties, 8.0 hours).

DACMI-580 2.0 UH-1Y A

Requirement. Reference the MAWTS-1 Course Catalog for the DACMI POI.

Ordnance. (60) Flares.

DACMI-581 2.0 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the DACMI POI.

Ordnance. (60) Flares.

DACMI-582 2.0 R E 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the DACMI POI.

Ordnance. (60) Flares.

DACMI-583 2.0 R E 2 H-1 A

Requirement. Reference the MAWTS-1 Course Catalog for the DACMI POI.

Ordnance. (60) Flares.

7. Night Systems Instructor (NSI)

a. Purpose. To certify the IUT as an NSI capable of safely conducting ground and airborne instruction of the UH-1Y night vision device (NVD) flight syllabus.

b. General. IUT will be Night Systems Qualified (NSQ) NAV MC DIR 3500.14 and designated AGI prior to beginning training.

c. Crew Requirements. IAW MAWTS-1 Course Catalog.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 sorties, 7.0 hours).

NSI-590 2.0 1 UH-1Y A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

NSI-591 2.0 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240.

External Syllabus Support. Aerial gunnery range.

NSI-592 2.0 R E 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

NSI-593 2.0 R E 2 H-1 A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

Ordnance. (1500) 7.62 mm GAU-17, (300) .50 Cal GAU-16, (400) 7.62 mm M240.

External Syllabus Support. Aerial gunnery range.

250. REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS, INSTRUCTOR DESIGNATIONS (RQRD, QUAL, DESG, IDSG)

1. Purpose. To provide a vehicle for tracking codes associated with qualifications and designations.

2. General

a. “E”-coded flights are evaluation flights. Some “E”-coded sorties in the 600-level phase may be logged in conjunction with any Core Skill Basic, Advanced or Plus sortie that meets the requirements laid out in the flight description. CRP is not awarded for 600-level sorties, however, CRP credit may be obtained by logging the appropriate training code(s) in the 200-400 level syllabus. Once the flight to attain the qualification/designation is complete, a letter from the squadron commanding officer awarding the qualification/designation shall be placed in the NATOPS and APR before that qualification/designation can be utilized. Crew served weapons listed for each event will be selected based on training requirements.

3. Ground Training. Per applicable directives.

RQRD-601 1.5 R E 1 UH-1Y A (NS)

Goal. Conduct the annual NATOPS evaluation.

Requirement. Conduct a CC/AO NATOPS evaluation per criteria in the UH-1Y NATOPS Manual.

Performance Standards. IAW NATOPS.

Prerequisite. CSIX-191.

Crew. ANI/CCUI or AOUI.

QUAL-610 E 1 UH-1Y A NS

Goal. Tracking code for TERF qualification.

Requirement. Successfully complete the requirements of CAL-201. Code shall be logged in conjunction with CAL-201.

Prerequisite. See CAL-200, 201.

QUAL-611 E 1 UH-1Y A NS

Goal. Tracking code for Night Systems (HLL) qualification.

Requirement. Successfully complete the requirements of OAS-273. This code shall be logged in conjunction with OAS-273.

Prerequisite. 201,221,231,232,242,254,255,256,262,273.

QUAL-612 E 1 UH-1Y A NS

Goal. Tracking code for Advanced Night Systems (LLL) qualification.

Requirement. Successfully complete the requirements of ANSQ-303. This code shall be logged in conjunction with ANSQ-303.

Prerequisite. ANSQ-301, 302 and 303.

QUAL-614 E 2 H-1 A

Goal. Tracking code for RWDACM qualification.
Requirement. Completion of the RWDACM stage meets the requirements for the CCUI/AOUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-614 shall be logged.

Prerequisite. DACM-431 and 432.

QUAL-615 2 H-1 A

Goal. Tracking code for FWDACM qualification.

Requirement. Successfully complete the requirements of DACM-435. This code shall be logged in conjunction with DACM-435.

Prerequisite. See DACM-434 and 435.

QUAL-616 1 UH-1Y A D/NS

Goal. Tracking code for Carrier Qualification.

Requirement. Successfully complete the requirements of CQ-451. This code shall be logged in conjunction with CQ-451.

Prerequisite. See CQ-450 and 451.

4. Aerial Gunner Qualification Stage

a. Purpose. To achieve qualification as an aerial gunner.

b. General

(1) Completion of this stage qualifies the CCUI/AOUI for designation as an aerial gunner on the respective weapon. Appropriate documentation (ATFs with rounds-count) will be completed for each weapon prior to designation as aerial gunner. A designation qualification letter shall be placed in the NATOPS Jacket with a copy in the APR and flight log book entry.

(2) AOUI requirement: RQD-620, 621, and 622.

c. Ground Training. Review MAWTS-1 Academic Support Package lectures and Aerial Gunnery Manual. Written examinations shall be administered prior to each individual weapon evaluation flight.

d. Crew Requirement. NSI/CCUI or AOUI.

e. Flight Training. (3 Sorties, 6.0 Hours).

QUAL-620 2.0 R E 2 H-1 A NS

Goal. GAU-16 aerial gunner qualification.

Requirement

(1) Discuss/brief weapon troubleshooting and malfunctions.

(2) Lasers should be used if available.

(3) Review BCWD principles.
Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the GAU-16 while using NVDs.

Prerequisite. NSQ (LLL), ANSQ-304.

Ordnance. 300 rds GAU-16.

External Syllabus Support. Aerial gunnery range.

QUAL-621 2.0 R E 2 H-1 A NS

Goal. GAU-17 aerial gunner qualification.

Requirement

(1) Discuss/brief weapon troubleshooting and malfunctions.

(2) Lasers should be utilized if available.

(3) Review BCWD principles.

Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the GAU-17 while using NVDs.

Prerequisite. NSQ (LLL), ANSQ-305.

Ordnance. 1500 rds 7.62mm GAU-17.

External Syllabus Support. Aerial gunnery range.

QUAL-622 2.0 R E 2 H-1 A NS

Goal. M-240 aerial gunner qualification.

Requirement

(1) Discuss/brief weapon troubleshooting and malfunctions.

(2) Lasers should be used if available.

(3) Review BCWD principles.

Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the M-240 while using NVDs.

Prerequisite. NSQ (LLL), ANSQ-306.

Ordnance. 400 rds 7.62mm M-240.

External Syllabus Support. Aerial gunnery range.

IDSG-680 E 1 UH-1Y A

Goal. Tracking code for CCI designation.
Requirement. Successfully complete the requirements of CCI-504. Code shall be logged in conjunction CCI-504.

Performance Standards. See CCI-504.

Prerequisite. See CCI-500 and 504.

External Syllabus Support. See CCI-504.

IDSG-681 E 2 H-1 A

Goal. Tracking code for TERFI designation.

Requirement. Successfully complete requirements per the MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. TERF-570, TERF-571.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-682 E 2 H-1 A

Goal. Tracking code for AGI GAU-16 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. INDSG-681 and NSQ LLL.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-683 E 2 H-1 A

Goal. Tracking code for AGI GAU-17 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. INDSG-681 and NSQ LLL.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-684 E 2 H-1 A

Goal. Tracking code for AGI M-240 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.
Prerequisite. INDSG-681 and NSQ LLL.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-688 E 2 H-1 A

Goal. Tracking code for DACMI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. DACMI-581, DACMI-583.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-693 E 1 UH-1Y A NS

Goal. Tracking code for NSSI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. 552.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-694 E 1 UH-1Y A NS

Goal. Tracking code for NSFI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. NSFI-561.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-696 E 2 H-1 A

Goal. Tracking code for NSI designation.

Requirement. Successfully complete the requirements IAW MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. NS1-593.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-699 E 1 UH-1Y A

Goal. Tracking code for WTI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. IAW MAWTS-1 Course Catalog.

External Syllabus Support. See MAWTS-1 Course Catalog.

260. ORDNANCE REQUIREMENTS

1 Annual ordnance requirements are derived by individual training requirements. Crew concept is taken into account between Pilot and CC/AO requirements. There are direct comparisons, by phase, between the number of Pilot sorties requiring ordnance and the number of CC/AO sorties requiring ordnance. For example, there are (10) 200 level pilot sorties requiring ordnance and there are also (10) 200 level CC/AO sorties requiring ordnance. The sorties are not an exact match, but can be executed in a manner so that extra sorties are not required for CC/AO training or pilot training. The only remaining factor for computing ordnance requirement is the difference in personnel, 23 pilots vs. 36 CC/AO. This is accounted for in the ordnance tables. Ordnance totals depicted are a repeat of the pilot T&R and reflect requirements for the UH aircrew community as a whole. Gun ammunition is almost exclusively for CC/AO training.

2. Expendable Ordnance

a. BASIC/REFRESHER/SERIES CONVERSION/INSTRUCTOR/ANNUAL

ORDNANCE*	**100**	**200**	**300**	**400**	**500 IUT**	**600 FL**	**R***	**SC***	**ANNUAL****
2.75″ Rockets	14 (21)	56 (83)	63 (77)	28 (35)	42 (49)	63	98	35 (49)	63
7.62mm GAU-17	3000 (4500)	15000 (19500)	9000 (13500)	7500 (9000)	9000 (10500)	13500	15000	9000 (12000)	10500
.50CAL GAU-16	1000 (1500)	3000 (3900)	1800 (2700)	1800 (2100)	1800 (2100)	2700	3000	1800 (2600)	2100
7.62mm M-240	0	4000 (5200)	2400 (3600)	2400 (2800)	2400 (2800)	3600	4000	2400 (2800)	2800
Chaff	0	160 (250)	240 (340)	160 (200)	160	260	240 (270)	120 (170)	210 (240)
Decoy flares	0	340 (450)	180 (260)	320 (340)	380 (410)	130	340 (370)	160 (230)	230 (260)

NOTES: Numbers in parentheses include S and S/A hops flown in aircraft to reflect times where no simulator is available.

* R and SC POI reflect ordnance requirement through 300 level.

** Annual ordnance requirements reflect sorties from the Maintain Table through 300 level. (40% HE, 30% Inert, 20% WP, 10% Illum.)

3. Ground Ordnance

a. BASIC/REFRESHER/SERIES CONVERSION/INSTRUCTOR/ANNUAL

ORDNANCE	100	200	300	400	500 IUT	600 FL	R*	SC*	ANNUAL**
HE Artillery	0	0	8 (13)	0	16	0	8 (13)	0	8
WP Artillery	0	0	4	0	8	0	4	0	4
CAS Bombs	0	0	16	4	8	0	16	0	8

NOTES: Numbers in parentheses include S and S/A hops flown in aircraft to reflect times where no simulator is available.

* R and SC POI reflect ground ordnance requirement through 300 level.

** Annual ground ordnance requirements reflect sorties from the Maintain Table through 300 level.

	INITIAL CREW(1)	REFRESHER CREW(2)	PROFICIENT CREW(3)
2.75″ RKTS – HE/INERT	98	63	42
2.75″ RKTS – WP/RP	28	28	14
2.75″ RKTS – ILLUM	7	7	7
2.75″ RKTS – APKWS/LOGIR	TBD	TBD	TBD
7.62MM – GAU-17	27000	15000	10500
.50 CAL – GAU-16	5800	3000	2100
7.62MM – M-240	6400	4000	2800
Chaff	400	240	210
Flares	520	340	230
PILOT (23)	7	8	8
CC/AO (36)	12	12	12

General: In these calculations ordnance is always included on ordnance optional sorties, but S and S/A sorties are not included. Requirements are per individual. Assumption is that Initial/Refresher syllabus may be completed in 1 year.

1. Initial Basic crews shall fly all 200 and 300 level events.
2. Refresher crews shall fly all R coded 200 and 300 level events.
3. Proficient crews are defined by the Core Skill Proficiency table on page 6 and their minimum annual ordnance requirements are driven by sorties in the Maintain Table.
4. Based on a full HMLA T/O of 23 UH pilots and 36 CC/AO, with the assumption that roughly 1/3 fall into each POI.
5. “Type” column indicates which aircrew factor is used to determine ordnance totals.

UH-1Y ANNUAL SQUADRON REQUIREMENTS					
	Type	INITIAL PILOT x 7 CC/AO x 12	REFRESHER PILOT x 8 CC/AO x 12	PROFICIENT PILOT x 8 CC/AO x 12	ANNUAL SQUADRON TOTAL
2.75″ RKTS – HE/INERT	P	686	504	336	1526
2.75″ RKTS – WP/RP	P	196	224	112	532
2.75″ RKTS – ILLUM	P	49	56	56	161
7.62MM – GAU-17	CC/AO	324000	180000	126000	630000
.50 CAL – GAU-16	CC/AO	69600	36000	25200	130800
7.62MM – M-240	CC/AO	76800	48000	33600	158400
CHAFF	P	2800	1920	1680	6400

FLARES	P	3640	2720	1840	8200

261. RANGE REQUIREMENTS

1. General. The range requirements listed below are based on event requirements listed in the individual event descriptions. Units should make every effort to adhere to the requirements listed in the event descriptions, but Commanding Officers may waive requirements based on existing range capabilities and limitations.

a. Specific Weapons Delivery (SWD), Advanced Night Systems Qual (ANSQ)

(1) All rotary-wing air to ground ordnance permitted.

(2) Expendable usage.

(3) Lasers permitted.

b. Offensive Air Support (OAS)

(1) All rotary-wing air to ground ordnance permitted.

(2) Expendable usage.

(3) Lasers permitted.

(4) Supports all three types of Close Air Support (CAS) control. Allows JTAC personnel in range.

c. Assault Support (ASPT)

(1) All rotary-wing air to ground ordnance permitted.

(2) Expendable usage.

(3) Lasers permitted.

d. Forward Air Controller (Airborne) (FAC(A))

(1) All rotary-wing air to ground ordnance permitted.

(2) All fixed-wing air to ground ordnance permitted.

(3) Expendable usage.

(4) Lasers permitted.

(5) Supports all three types of Close Air Support (CAS) control. Allows JTAC personnel in range.

(6) Ground indirect fire systems permitted (artillery/mortars).

e. Defensive Air Combat Maneuvering (DACM).

(1) Air Combat Maneuvering (ACM) permitted both fixed-wing and rotary-wing.

(2) Expendable usage.

(3) Tactical Air Combat Training System (TACTS) or comparable system compatible.

(4) Air to Air Missile firing capable, if applicable.

270. CREW CHIEF EVENT MATRIX

UH-1Y CREW CHIEF													
100 SERIES CORE SKILL INTRODUCTION													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
FAM														
FAM	104	INTRO GRD/FLT PROCEDURES	2.0		*	A	1	D				3.0		
FAM	105	INTRO COMM/PAX/EP	2.0		*	A	1	D	104	R,M,SC		3.0		
FAM	113	NVD FAM INTRO	2.0		*	A	1	NS	105,NIGHT LAB COMPLETE	R,M,SC		4.0		
			6.0									**10.0**		
FORM														
FORM	131	TAC FORM INTRO	2.0		*	A	2	D	105			3.0		
FORM	133	NVD FORM INTRO	2.0		*	A	2	NS	113,131			4.0		
			4.0									**7.0**		
TERF														
TERF	141	TERF INTRO	2.0		*	A	1	D	105	R,SC		3.0		
TERF	142	NVD TERF INTRO	2.0		*	A	1	NS	113,141	R		4.0		
			4.0									**7.0**		
NAV														
NAV	151	TERF NAV INTRO	2.0		*	A	2	D	141			3.0		
NAV	152	NVD NAV INTRO	2.0		*	A	2	NS	142,151			4.0		
			4.0									**7.0**		
SWD														
SSWD	160	BCWD INTRO		1.5	*	S		D				3.0		
SWD	161	BCWD REVIEW	2.0		*	A	2	D	131,151,160			4.0		
			2.0	**1.5**								**7.0**		
TAC														
TAC	181	CAL/HIE INTRO	2.0		*	A	1	D	105			3.0		
TAC	182	TAC CAL INTRO	1.5		*	A	1	D	181	R,SC		4.0		
TAC	183	NVD CAL INTRO	2.0		*	A	1	NS	113,181			4.0		
TAC	184	EXTERNAL INTRO	2.0		*	A	1	D	181			3.0		
			7.5									**14.0**		
CSIX														
CSIX	191	CORE SKILL INTRO CHECK	2.0		365	A	1	D	STAGE COMPLETE	R,M,SC	E	8.0		
			2.0									**8.0**		
TOTAL FLT/SIM HOURS FOR STAGE			**29.5**	**1.5**	**TOTAL CRP FOR STAGE**							**60.0**		

UH-1Y CREW CHIEF													
200 SERIES CORE SKILL BASIC													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
TERF													
TERF	200	REVIEW TERF	2.0	120	A	2	D				1.0		210
TERF	201	REVIEW NVD TERF	2.0	120	A	2	NS	200	R	E	1.0	200	
			4.0								**2.0**		
REC													
REC	221	INTRO RECCE	2.0	365	A	2	NS	201	R		0.5		
			2.0								**0.5**		
CAL													
CAL	230	SECTION CAL	2.0	180	A	2	D	201	R		1.0	200	220
CAL	231	INTRO NVD SECTION CAL	2.0	180	A	2	NS	230			0.5	200,201,230	221
CAL	232	NVD SECTION CAL REVIEW	2.0	180	A	2	NS	231	R		1.0	200,201,230,231	
			6.0								**2.5**		
FCLP													
FCLP	241	DAY FCLP	1.0	365	A	1	D		R		0.5		431
FCLP	242	NVD FCLP	1.0	365	A	1	NS	241	R		0.5	241	432
			2.0								**1.0**		
SWD													
SWD	251	INTRO GAU-16	2.0	180	A	2	D	201			1.0	200	240
SWD	252	INTRO GAU-17	2.0	180	A	2	D	201			1.0	200	241
SWD	253	INTRO M240	2.0	180	A	2	D	201			1.0	200	242
SWD	254	INTRO NVD GAU-16	2.0	180	A	2	NS	251	R		1.0	200,201,251	
SWD	255	INTRO NVD GAU-17	2.0	180	A	2	NS	252	R		1.0	200,201,252	
SWD	256	INTRO NVD M240	2.0	180	A	2	NS	253	R		1.0	200,201,253	
			12.0								**6.0**		
ESC													
ESC	262	NVD ASPT ESCORT	2.0	365	A	2	NS	254,255,OR 256 BASED ON CONFIGURATION	R		0.5	200,201,251,252,253, 254,255,256	250
ESC	263	INTRO SURFACE ESCORT	2.0	365	A	2	(NS)	231,(233)If flown at night (254,256,257) BASED ON CONFIGURATION	R		1.0	200,201,230,232,251, 252,253,254,255,256	
			4.0								**1.5**		
OAS													
OQS	272	INTRO URBAN CAS	2.0	365	A/S	2	(NS)	251-253 (254-256) BASED ON CONFIGURATION	R		0.5	200,251,252,253, (201,254,255,256)	
OAS	273	NVD RWCAS	2.0	180	A	2	NS	272,254-256 BASED ON CONFIGURATION	R	E	1.0	200,201,251,252,253, 254,255,256,272	
			4.0								**1.5**		
TOTAL FLT HOURS FOR STAGE			**34.0**	**TOTAL CRP FOR STAGE**							**15.0**		

UH-1Y CREW CHIEF													
300 SERIES CORE SKILL ADVANCED													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
ANSQ													
ANSQ	301	NVD CALS	2.0	180	A	1	NS	NSQ (HLL)			1.0	200,201,230,231,232	311
ANSQ	302	NVD SEC TERF/NAV	2.0	180	A	2	NS	301			1.0	200,201,230,231,232,301	312
ANSQ	303	NVD SEC TACTICS	2.0	180	A	2	NS	302	R		2.0	200,201,230,231,232,301,302	
ANSQ	304	LLL GAU-16	2.0	180	A	2	NS	254,302	R		2.0	200,201,251,254	
ANSQ	305	LLL GAU-17	2.0	180	A	2	NS	255,302	R		2.0	200,201,252,255	
ANSQ	306	LLL M240	2.0	180	A	2	NS	256,302	R	E	2.0	200,201,253,256	
			12.0								**10.0**		
ASSAULT SUPPORT													
ASPT	310	FASTROPE/RAPPEL	2.0	730	A	1	D	230			1.0	200,230	403,404
ASPT	311	NVD FASTROPE/RAPPEL INTRO	2.0	365	A	1	NS	232,310 (306 IF LLL)	R		1.0	200,201,230,231,232,310	
ASPT	313	URBAN ENVIROMENT INSERT/EXTRACT	2.0	365	A	2	(NS)	232 (306 IF LLL)			1.0	200,201,230,231,232	313
ASPT	314	NVD INSERT/EXTRACT	2.0	180	A	2	NS	232,272	R		1.0	200,230,313,201,231,232	313
ASPT	315	TRAP MISSION	2.0	730	A	2	(NS)	230 (232)			1.0	200,230, (201,231,232)	320
ASPT	316	NVD ESCORT	2.0	365	A	2	NS	262	R		1.0	200,201,251,252,253,254,255,256,262,315	322
			12.0								**6.0**		
OAS													
OAS	322	CAS	2.0	180	A	2	(NS)	273,(306 IF LLL)	R		1.0	200,201,221,230,231,232,251,252,253,254,255,256,273,(301 302,303,304,305,306)	321
			2.0								**1.0**		
FACA													
FACA	332	FW CONTROL	2.0	365	A	2	D	251-253 BASED ON CONFIGURATION	R		1.0	200,251,252,253	
FACA	333	NVD FW CONTROL	2.0	365	A	2	NS	254-256 BASED OF CONFIGURATION	R		2.0	200,201,251,252,253,254,255,256,332	
			4.0								**3.0**		
TOTAL FLT HOURS FOR STAGE			**30.0**	**TOTAL CRP FOR STAGE**							**20.0**		

UH-1Y CREW CHIEF														
400 SERIES CORE SKILL PLUS														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
ASSAULT SUPPORT														
ASPT	400	INTRO PARADROPS OPS	1.0		*	A	1	(NS)	232(HLL) OR 303(LLL)			0.3		
ASPT	401	INTRO WATER INSERTION	1.5		*	A	1	D	201			0.3		401
ASPT	402	INTO SPIE	1.5		730	A	1	D	201	R		0.3	200,230	402
ASPT	404	MAL INTRO	2.0		365	A	1	(NS)	230(232 HLL,301 LLL)	R		0.3	200,230(201,231)	
ASPT	405	EMERG HOIST/EXTERNAL LOADS	1.5		*	A	1	D	201,230	R		0.3		405
			7.5									**1.5**		
OAS														
OAS	416	URBAN OAS	2.0		730	A	2	D	272			0.3	200,251,252,253	
OAS	417	NVD URBAN OAS	2.0		730	A	2	NS	416	R		0.5	200,201,251,252,253,254, 255,256,272,273,322,416	
			4.0									**0.8**		
DACM														
DACM	430	A/A GUNNERY	1.5		730	A	2	D	201,251-253 BASED ON CONFIGURATION	R		0.3	200,251,252,253	410
DACM	431	1V1RW	2.0		730	A	1	D	201			0.3	200	411
DACM	432	2V1RW	2.0		730	A	2	D	431	R	E	0.4	200,431	412
DACM	434	1V1FW	2.0		730	A	1	D	201	R		0.3	200	414
DACM	435	2V2FW	2.0		730	A	2	D	434	R	E	0.4	200,434	416
			9.5									**1.7**		
NBC														
NBC	440	AR-5	1.0		730	A	1	D	230,(233)If flown at night	R		0.3		420
			1.0									**0.3**		
CQ														
CQ	450	DAY CQ	1.0		365	A	1	D	241	R		0.3	241	433
CQ	451	UNAIDED/NVD CQ	1.0		365	A	1	N*/NS	242,450	R	E	0.4	241,242,450	434
			2.0									**0.7**		
TOTAL FLT/SIM HOURS FOR STAGE			**24.0**						**TOTAL CRP FOR STAGE**			**5.0**		

UH-1Y CREW CHIEF														
500 SERIES INSTRUCTOR UNDER TRAINING														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
CCI													
CCI	500	INSTRUCTOR TECHNIQUES	2.0	*	A	1	D	AGI		E			500
CCI	504	EXTERNAL/HOIST INSTRUCTOR	2.0	*	A	1	D	500		E			504
			4.0								**0.0**		
AGI													
AGI	540	AAG	2.0	*	A	1	D	612,620,621,622,681,REF COURSE CATALOG					540
AGI	541	DAY GAU-16	2.0	*	A	2	D	540,620,681,REF COURSE CATALOG					541
AGI	542	NVD GAU-16	2.0	*	A	2	NS	541					542
AGI	543	NVG GAU-16	2.0	*	A	2	NS	542	R	E			543
AGI	544	DAY GAU-17	2.0	*	A	2	D	540,621,681,REF COURSE CATALOG					544
AGI	545	NVD GAU-17	2.0	*	A	2	NS	544					545
AGI	546	NVD GAU-17	2.0	*	A	2	NS	545	R	E			546
AGI	547	DAY M240	2.0	*	A	2	D	540,622,681,REF COURSE CATALOG					547
AGI	548	NVD M240	2.0	*	A	2	NS	547					548
AGI	549	NVD M240	2.0	*	A	2	NS	548	R	E			549
			20.0								**0.0**		
NSSI													
NSSI	550	CALS/NAV	1.0	*	A	1	NS	612					562
NSSI	551	CALS/NAV	1.0	*	A	1	NS	550					563
NSSI	552	CALS/NAV	2.0	*	A	1	NS	551	R	E			564
			4.0								**0.0**		
NSFI													
NSFI	560	FAM	1.0	*	A	1	NS	681					560
NSFI	561	CALS/NAV	2.0	*	A	1	NS	560	R	E			561
			3.0								**0.0**		
TERFI													
TERFI	570	TERF/NAV	2.0	*	A	1	D	612,620,621,622	R	E			570
TERFI	571	TERF/NAV	2.0	*	A	2	D	570	R	E			571
			4.0								**0.0**		
DACMI													
DACMI	580	1V1RW	2.0	*	A	1	D	681					580
DACMI	581	2V1FW	2.0	*	A	2	D	580					581
DACMI	582	2V1RW	2.0	*	A	2	D	681	R	E			582
DACMI	583	2V2FW	2.0	*	A	2	D	582	R	E			583
			8.0								**0.0**		
NSI													
NSI	590	NVD CALS	2.0	*	A	1	NS	682,683,684					590
NSI	591	NVD ORD CALS/TERF	2.0	*	A	2	NS	590					591
NSI	592	NVD TAC FORM/CALS	2.0	*	A	2	NS	591	R	E			593
NSI	593	TACTICAL NVD ORD	2.0	*	A	2	NS	592	R	E			594
			8.0								**0.0**		
TOTAL FLT HOURS FOR STAGE			**51.0**					**TOTAL CRP FOR STAGE**			**0.0**		

UH-1Y CREW CHIEF													
600 SERIES REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
RQD													
RQD	601	ANNUAL NATOPS CHECK	1.5	365	A	1	(NS)			E			
			1.5								**0.0**		
QUAL													
QUAL	610	TERF TRACK CODE			A			200,201					
QUAL	611	NSQ (HLL) TRACK CODE			A								
QUAL	612	NSQ (LLL) TRACK CODE			A								
QUAL	614	RWDACM TRACK CODE			A								
QUAL	615	FWDACM TRACK CODE			A								
QUAL	616	CQ TRACK CODE			A								
			0.0								**0.0**		
QUAL													
QUAL	620	AG GAU-16	2.0	*	A	2	NS	NSQ LLL,304	R	E			
QUAL	621	AG GAU-17	2.0	*	A	2	NS	NSQ LLL,305	R	E			
QUAL	622	AG M240	2.0	*	A	2	NS	NSQ LLL,306	R	E			
			6.0								**0.0**		
IDSG	680	CCI TRACK CODE						AGI					
IDSG	681	TERFI TRACK CODE						570,571					
IDSG	682	GAU-16 TRACK CODE						681,NSQ LLL					
IDSG	683	GAU-17 TRACK CODE						681,NSQ LLL					
IDSG	684	M240 TRACK CODE						681,NSQ LLL					
IDSG	688	DACMI TRACK CODE						581,583					
IDSG	693	NSSI TRACK CODE						552					
IDSG	694	NSFI TRACK CODE						561					
IDSG	696	NSI TRACK CODE						593					
IDSG	699	WTI TRACK CODE						IAW MAWTS-1 WTI COURSE					
			O.O								**0.0**		
		TOTAL FLT HOURS FOR STAGE	**7.5**					**TOTAL CRP FOR STAGE**			**0.0**		

271. AERIAL OBSERVER EVENT MATRIX

UH-1Y AERIAL OBSERVER														
100 SERIES CORE SKILL INTRODUCTION														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
FAM														
FAM	104	INTRO GRD/FLT PROCEDURES	2.0		*	A	1	D				4.0		
FAM	113	NVD FAM INTRO	2.0		*	A	1	NS	104,NIGHT LAB COMPLETE	R,M,SC		4.0		
			4.0									**8.0**		
FORM														
FORM	131	TAC FORM INTRO	2.0		*	A	2	D	104			5.0		
FORM	133	NVD FORM INTRO	2.0		*	A	2	NS	113,131			5.0		
			4.0									**10.0**		
TERF														
TERF	141	TERF INTRO	2.0		*	A	1	D	104	R,SC		5.0		
TERF	142	NVD TERF INTRO	2.0		*	A	1	NS	113,141	R		5.0		
			4.0									**10.0**		
NAV														
NAV	152	NVD NAV INTRO	2.0		*	A	2	NS	113			5.0		
			2.0									**5.0**		
SWD														
SSWD	160	BCWD INTRO		1.5	*	S		D				2.0		
SWD	161	BCWD REVIEW	2.0		*	A	2	D	104,160			5.0		
			2.0	**1.5**								**7.0**		
TAC														
TAC	182	TAC CAL INTRO	1.5		*	A	1	D	104	R,SC		5.0		
TAC	183	NVD CAL INTRO	2.0		*	A	1	NS	113,182			5.0		
			3.5									**10.0**		
CSIX														
CSIX	191	CORE SKILL INTRO CHECK	2.0		*	A	1	D	STAGE COMPLETE	R,M,SC	E	10.0		
			2.0									**10.0**		
TOTAL FLT/SIM HOURS FOR STAGE			**21.5**	**1.5**	**TOTAL CRP FOR STAGE**							**60.0**		

UH-1Y AERIAL OBSERVER													
200 SERIES CORE SKILL BASIC													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
TERF													
TERF	200	REVIEW TERF	2.0	120	A	2	D				1.0		210
TERF	201	REVIEW NVD TERF	2.0	120	A	2	NS	200	R		1.0	200	
			4.0								**2.0**		
REC													
REC	221	INTRO RECCE	2.0	365	A	2	NS	201	R		1.0		
			2.0								**1.0**		
CAL													
CAL	230	SECTION CAL	2.0	180	A	2	D	201	R		1.0	200	220
CAL	232	NVD SECTION CAL REVIEW	2.0	180	A	2	NS	230	R	E	1.0	200,201,230	
			4.0								**2.0**		
FCLP													
FCLP	241	DAY FCLP	1.0	365	A	1	D	201	R		1.0		431
FCLP	242	NVD FCLP	1.0	365	A	1	NS	241	R		1.0	241	432
			2.0								**2.0**		
SWD													
SWD	251	INTRO GAU-16	2.0	180	A	2	D	201			1.0	200	240
SWD	252	INTRO GAU-17	2.0	180	A	2	D	201			1.0	200	241
SWD	253	INTRO M240	2.0	180	A	2	D	201			1.0	200	242
SWD	254	INTRO NVD GAU-16	2.0	180	A	2	NS	251	R		1.0	200,201,251	
SWD	255	INTRO NVD GAU-17	2.0	180	A	2	NS	252	R		1.0	200,201,252	
SWD	256	INTRO NVD M240	2.0	180	A	2	NS	253	R		1.0	200,201,253	
			12.0								**6.0**		
ESC													
ESC	263	INTRO SURFACE ESCORT	2.0	365	A	2	(NS)	201	R		1.0	200,201,221,230,232,251, 252,253,254,255,256	
			2.0								**1.0**		
OAS													
OAS	273	NVD RWCAS	2.0	180	A	2	NS	254-256 BASED ON CONFIGURATION	R	E	1.0	200,201,221,230,232,251,252,253, 254,255,256	
			2.0								**1.0**		
TOTAL FLT HOURS FOR STAGE			**28.0**	**TOTAL CRP FOR STAGE**							**15.0**		

UH-1Y AERIAL OBSERVER													
300 SERIES CORE SKILL ADVANCED													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
ANSQ													
ANSQ	301	NVD CALS	2.0	180	A	1	NS	NSQ (HLL)			1.0	200,201,230,231,232	311
ANSQ	302	NVD SEC TERF/NAV	2.0	180	A	2	NS	301			1.5	200,201,230,232,301	312
ANSQ	303	NVD SEC TACTICS	2.0	180	A	2	NS	302	R		3.0	200,201,230,232,301,302	
ANSQ	304	LLL GAU-16	2.0	180	A	2	NS	254,302	R		2.5	200,201,251,254	
ANSQ	305	LLL GAU-17	2.0	180	A	2	NS	255,302	R		2.5	200,201,252,255	
ANSQ	306	LLL M240	2.0	180	A	2	NS	256,302	R	E	2.5	200,201,253,256	
			12.0								**13.0**		
ASSAULT SUPPORT													
ASPT	314	NVD INSERT/EXTRACT	2.0	180	A	2	NS	230,272	R		2.0	200,230,(201,232)	313
ASPT	316	NVD ESCORT	2.0	365	A	2	NS	262	R		2.0	200,201,251,252,253,254,255,256,262	322
			4.0								**4.0**		
FACA													
FACA	332	FW CONTROL	2.0	365	A	2	D	251-253 BASED ON CONFIGURATION	R		1.0	200,251,252,253	
FACA	333	NVD FW CONTROL	2.0	365	A	2	NS	254-256 BASED OF CONFIGURATION	R		2.0	200,201,251,252,253,254,255,256,332	
			4.0								**3.0**		
TOTAL FLT HOURS FOR STAGE			**20.0**	**TOTAL CRP FOR STAGE**							**20.0**		

UH-1Y AERIAL OBSERVER														
400 SERIES CORE SKILL PLUS														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
ASSAULT SUPPORT														
ASPT	404	MAL INTRO	2.0		365	A	1	(NS)	230(232 HLL, 301 LLL)	R		0.5	200,230(201,232)	
			2.0									**0.5**		
OAS														
OAS	416	URBAN OAS	2.0		730	A	2	D	273			0.4	200,251,252,253	
OAS	417	NVD URBAN OAS	2.0		730	A	2	NS	416	R		0.6	200,201,251,252,253,254, 255,256,273,416	
			4.0									**1.0**		
DACM														
SDACM	430	A/A GUNNERY		1.5	730	S/A	2	D	201,251-253 BASED ON CONFIGURATION	R		0.4	200,251,252,253	410
DACM	431	1V1RW	2.0		730	A	1	D	201			0.4	200	411
DACM	432	2V1RW	2.0		730	A	2	D	431	R	E	0.5	200,431	412
DACM	434	1V1FW	2.0		730	A	1	D	201	R		0.4	200	414
DACM	435	2V2FW	2.0		730	A	2	D	434	R	E	0.5	200,434	416
			8.0	**1.5**								**2.2**		
NBC														
NBC	440	AR-5	1.0		730	A	1	D	201	R		0.4		420
			1.0									**0.4**		
CQ														
CQ	450	DAY CQ	1.0		365	A	1	D	241	R		0.4	241	433
CQ	451	UNAIDED/NVD CQ	1.0		365	A	1	N*/NS	242,450	R	E	0.5	241,242,450	434
			2.0									**0.9**		
TOTAL FLT/SIM HOURS FOR STAGE			**22.5**	**1.5**					**TOTAL CRP FOR STAGE**			**5.0**		

UH-1Y AERIAL OBSERVER													
500 SERIES INSTRUCTOR UNDER TRAINING													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	REFLY INTERVAL	DEVICE	# OF A/C OR SIM	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
AGI													
AGI	540	AAG	2.0	*	A	1	D	612,620,621,622,REF COURSE CATALOG					540
AGI	541	DAY GAU-16	2.0	*	A	2	D	540,620,REF COURSE CATALOG					541
AGI	542	NVD GAU-16	2.0	*	A	2	NS	541					542
AGI	543	NVG GAU-16	2.0	*	A	2	NS	542	R	E			543
AGI	544	DAY GAU-17	2.0	*	A	2	D	540,621,REF COURSE CATALOG					544
AGI	545	NVD GAU-17	2.0	*	A	2	NS	544					545
AGI	546	NVD GAU-17	2.0	*	A	2	NS	545	R	E			546
AGI	547	DAY M240	2.0	*	A	2	D	540,622,REF COURSE CATALOG					547
AGI	548	NVD M240	2.0	*	A	2	NS	547					548
AGI	549	NVD M240	2.0	*	A	2	NS	548	R	E			549

			20.0								0.0		
UH-1Y AERIAL OBSERVER													
600 SERIES REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS													
STAGE	**TRNG CODE**	**EVENT DESCRIPTION**	**FLIGHT HOURS**	**REFLY INTERVAL**	**DEVICE**	**# OF A/C OR SIM**	**CONDITIONS**	**PREREQ**	**POI**	**EVALUATION**	**CRP**	**CHAINING**	**EVENT CONVERSION**
RQD													
RQD	601	ANNUAL NATOPS CHECK	1.5	365	A	1	(NS)			E			
			1.5								**0.0**		
QUAL													
QUAL	610	TERF TRACK CODE			A			200,201					
QUAL	611	NSQ (HLL) TRACK CODE			A								
QUAL	612	NSQ (LLL) TRACK CODE			A								
QUAL	614	RWDACM TRACK CODE			A								
QUAL	615	FWDACM TRACK CODE			A								
QUAL	616	CQ TRACK CODE			A								
			0.0								**0.0**		
QUAL													
QUAL	620	AG GAU-16	2.0	*	A	2	NS	NSQ LLL,304	R	E			
QUAL	621	AG GAU-17	2.0	*	A	2	NS	NSQ LLL,305	R	E			
QUAL	622	AG M240	2.0	*	A	2	NS	NSQ LLL,306	R	E			
			6.0								**0.0**		
IDSG	682	GAU-16 TRACK CODE						NSQ LLL					
IDSG	683	GAU-17 TRACK CODE						NSQ LLL					
IDSG	684	M240 TRACK CODE						NSQ LLL					
			O.O								**0.0**		
		TOTAL FLT HOURS FOR STAGE	**7.5**					**TOTAL CRP FOR STAGE**			**0.0**		